







THE ARCHITECTURAL RECORD

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THE ARCHITECTURAL RECORD

INDEX

Volume XXXIX

January-June, 1916

ARTICLES

	PAGE
ALBANY ACADEMY, THE. PART I. MEASURED AND DRAWN BY J. L. DYKEMAN AND F. J. RICKER. TEXT BYC. B. Cutler.....	132-143
ALBANY ACADEMY, THE. PART II. MEASURED AND DRAWN BY J. L. DYKEMAN AND F. J. RICKER. TEXT BYC. B. Cutler.....	247-264
AMERICAN HOSPITAL DEVELOPMENT, THE. PART II.....	Edward F. Stevens..... 65-83
ARCHITECTURE OF DEMOCRACY, AN. THREE RECENT EX- AMPLES FROM THE WORK OF LOUIS H. SULLIVAN....	A. N. Rebori..... 436-465
ARMOUR (J. OGDEN), COUNTRY HOUSE, "MELODY FARM," LAKE FOREST, ILL.....	Peter B. Wight..... 97-121
BARRETT APARTMENT HOUSE, THE, CHICAGO.....	William D. Foster..... 144-154
BARTLETT'S (PAUL W.) LATEST SCULPTURE.....	John J. Klaber..... 265-278
BELMONT'S (MRS. O. H. P.) TEA-HOUSE, NEWPORT, R. I.....	DeWitt H. Fessenden..... 499-512
CARTER MEMORIAL HOSPITAL, LANCASTER, MASS.....	Martin Mower 332-337
COBB BUILDING, THE, SEATTLE.....	John J. Klaber..... 154-160
COLONIAL ARCHITECTURE IN CONNECTICUT. PART V....	Wesley S. Bessell..... 53-64
DOMES OF THE OLD ST. LOUIS HOTEL, THE.....	N. C. Curtis..... 355-358
GOthic ARCHITECTURE AND ITS CRITICS. PART I. THE LURE OF GOTHIC.....	A. D. F. Hamlin..... 338-354
GOthic ARCHITECTURE AND ITS CRITICS. PART II. THE DEFINITION OF GOTHIC.....	A. D. F. Hamlin..... 419-435
McKIM (CHARLES FOLLEN), PERSONAL REMINISCENCES OF. PART III. McKIM AND THE WHITE HOUSE....	Glenn Brown 84-88
McKIM (CHARLES FOLLEN), PERSONAL REMINISCENCES OF. PART IV. McKIM'S WAY.....	Glenn Brown 178-185
MELLOR & MEIGS, EXAMPLES OF THE WORK OF.....	Harold D. Eberlein..... 212-246
NEW YORK CITY HALL, THE. PART I. HISTORICAL NOTES	Charles C. May..... 299-319
NEW YORK CITY HALL, THE. PART II. THE WORK OF RESTORATION	Charles C. May..... 474-490
NEW YORK CITY HALL, THE. PART III. THE WORK OF RESTORATION (<i>Continued</i>)	Charles C. May..... 513-535
OLD CHURCHES OF PANAMA. DRAWINGS AND TEXT BY....	C. P. Kimball..... 536-550
PASTORIUS PARK, PHILADELPHIA, AND ITS RESIDENTIAL DEVELOPMENT	Harold D. Eberlein..... 24-39
PENN MUTUAL BUILDING, THE, PHILADELPHIA.....	Harold D. Eberlein..... 122-131
PUBLIC LIBRARY AT WALTHAM, MASS.....	Martin Mower 320-331
ROGERS (H. H.) COUNTRY HOUSE, SOUTHAMPTON, L. I.....	John T. Boyd, Jr..... 1-23
TWO COUNTRY HOUSES AT SOUTHAMPTON, L. I. GOODHUE LIVINGSTON, ESQ., AND C. B. MACDONALD, ESQ.....	John T. Boyd, Jr..... 197-211
Y. M. C. A. COLLEGE IN CHICAGO, THE.....	Peter B. Wight..... 395-418

THE ARCHITECT'S LIBRARY (BOOK REVIEWS)

BOOKS ON COLONIAL ARCHITECTURE. PART II. SECULAR BUILDINGS (<i>Continued</i>)	Richard F. Bach..... 89-93
--	----------------------------

THE ARCHITECT'S LIBRARY (Continued).		PAGE
BOOKS ON COLONIAL ARCHITECTURE. PART III. DWELL-INGS	Richard F. Bach	186-190
PROF. FROTHINGHAM'S NEW VOLUMES IN STURGIS'S HISTORY OF ARCHITECTURE	Ralph Adams Cram	290 292
BOOKS ON COLONIAL ARCHITECTURE. PART III. DWELL-INGS (Continued)	Richard F. Bach	292-294
BOOKS ON COLONIAL ARCHITECTURE. PART III. DWELL-INGS (Continued)	Richard F. Bach	384-389
THE FAMOUS IRON WORK OF SPAIN	Marrison Wilcox	491-493
A MANUAL ON LIGHTING	Richard F. Bach	493-494
BOOKS ON COLONIAL ARCHITECTURE. PART III. DWELL-INGS (Continued)	Richard F. Bach	568-575

NOTES AND COMMENTS

- January:* The Critic Defined—A Public Bathhouse at Pompeii—A Praiseworthy Innovation at Columbia.
- February:* The Various Vane—Institutionalism—Somerset House—Hawksmoor—Trafalgar Square.
- March:* A Reminiscence and an Appreciation—An Interesting Schoolhouse.
- April:* Fire Protection and the Schools—The Residence of Mrs. R. L. Stevens—Federal Buildings—Italian Parliament Buildings.
- May:* The Tomb of Perneb—Liverpool School of Architecture.
- June:* The Architect and the Civic Conscience—A Bibliographical Annotation—A Challenge to Twentieth Century Materialism—The Architectural Record's Twenty-fifth Anniversary.

COVER DESIGNS

- January:* Doorway to Country House of H. H. Rogers, Esq., at Southampton, L. I.
- February:* Pool at Melody Farm, Lake Forest, Ill.
- March:* The Gate of Justice, at Granada. Water Color by John Mead Howells.
- April:* The New York City Hall. Water Color by Charles C. May.
- May:* A Colonial Doorway.
- June:* Detail of Mrs. O. H. P. Belmont's Tea-House at Newport, R. I. Water Color by Hunt & Hunt.

TYPES OF BUILDINGS ILLUSTRATED

	ARCHITECT	PAGE
APARTMENTS.		
The Barrett Apartments	Richard E. Schmidt, Garden & Martin	144-153
BANKS.		
Bank of Nova Scotia, Havana, Cuba	Arthur, Lobo, D'Oench & Yost Assoc.	46 48
City National Bank, Evansville, Ind.	Mundie & Jensen	173-174
Merchants National Bank	Louis H. Sullivan	436-448
The Home Bldg. Ass'n Co.	Louis H. Sullivan	450-459
Land and Loan Office	Louis H. Sullivan	460-464
Metropolitan Trust Co.'s Fifth Ave. Branch	Holmes & Winslow	551-553
BARN AND POLO STABLES.		
A. J. Drexel Paul, Esq.	Mellor & Meigs	234
CASINOS.		
At J. Ogden Armour's Res., Melody Farm, Lake Forest, Ill.	Arthur Heun	112, 114
CHURCHES.		
Summit Presbyterian Church, Germantown	Duhring, Okie & Ziegler	285-289
Reims Cathedral		338, 425
Canterbury Cathedral		341
Amiens Cathedral		342
Notre Dame, Paris		347
Beverley Minster		348
Hereford Cathedral		349

TYPES OF BUILDINGS ILLUSTRATED (Continued).

CHURCHES.	ARCHITECT	PAGE
Abbey of Vezelay.....		421
Le Mans Cathedral.....		423
Exeter Cathedral.....		426
Salamanca Cathedral.....		428
Cathedral of Florence.....		433, 434
Jesuit Mission, Panama City.....		536
The Cathedral, Panama City.....		538
San Felipe, Panama City.....		539, 541
San Francisco, Panama City.....		540, 542
La Mercedes, Panama City.....		543
San José, Panama City.....		544
Suburban Church, Panama City.....		545
San Domingo, Panama City.....		546, 547
Saboga, Pearl Islands.....		548
Village Church, Taboga Island, Panama.....		549
CLUBS.		
Pickering Hunt Club.....	Mellor & Meigs.....	244-245
Princeton Charter Club.....	Mellor & Meigs.....	255-257
Phi Gamma Delta Fraternity House, Philadelphia.....	Mellor & Meigs.....	238-239
COLLEGES.		
Y. M. C. A. College, Chicago.....	Emery Stanford Hall.....	395-418
COMMERCIAL BUILDINGS.		
Penn Mutual Building.....	Edgar V. Seeler.....	122-131
Cobb Building.....	Howells & Stokes.....	154-161
Rossia Insurance Co.'s Bldg.....	Edward T. Hapgood.....	168-171
COURT HOUSES.		
New Haven (Conn.) County Court House.....	Allen & Williams.....	360-367
DOMESTIC ARCHITECTURE (City, Country and Suburban).		
Frame and Half-Timber—		
Dr. Francis W. Murray, South Ashfield, Mass.....	Mellor & Meigs.....	224-225
William A. Childs, Esq., Riverside, Cal.....	Geo. A. Clark.....	280-282
Mrs. R. L. Stevens, Bernardsville, N. J.....	Lord, Hewlett & Tallant.....	372-376
Mrs. P. F. Collier, Southampton, L. I.....	Warren & Clark.....	554-557
Stucco and Concrete—		
H. H. Rogers, Esq., Southampton, L. I.....	Walker & Gillette.....	1-23
Group of Houses on Crefeldt St., St. Martins, Pa.....	Robert Rodes McGoodwin.....	30-34
House near Crefeldt St., St. Martins, Pa.....	Edmund B. Gilchrist.....	35
Geo. B. Montgomery, Esq., Amherst Estates, Buf- falo, N. Y.....	Mann & Cook.....	49-52
Edwin M. Colvin, Esq., Chicago.....	Geo. W. Maher.....	175
Mrs. William J. Willcox, St. Davids, Pa.....	Mellor & Meigs.....	222-223
E. F. Beale, Esq., Strafford, Pa.....	Mellor & Meigs.....	229-230
Caspar Wister Morris, Esq., Haverford, Pa.....	Mellor & Meigs.....	231
Country House near Philadelphia.....	Mellor & Meigs.....	232, 233
Brick and Stone—		
Group of Houses on Willow Grove Ave., Philadel- phia.....	Robert Rodes McGoodwin.....	24-29
J. Ogden Armour, Esq., "Melody Farm," Lake Forest, Ill.....	Arthur Heun.....	97-121
House at 15 East 74th St., New York City.....	Hewitt & Bottomley.....	162-167
House on Llanfair Road, Ardmore, Pa.....	Horace Wells Sellers.....	176-177
C. B. MacDonald, Esq., Southampton, L. I.....	F. Burrall Hoffman, Jr.....	199-205
Goodhue Livingston, Esq., Southampton, L. I.....	Goodhue Livingston.....	207-211
House at Cynwyd, Pa.....	Mellor & Meigs.....	212-215
Leonard T. Beale, Esq., St. Davids, Pa.....	Mellor & Meigs.....	217-221
J. C. Rea, Esq., Pittsburgh, Pa.....	MacClure & Spahr.....	277-380
H. R. Rea, Esq., Sewickley Heights, Pa.....	Albert H. Spahr.....	381-383
GARDEN BUILDING.		
Garden Building for Charles Biddle, Esq., Anda- lusia, Pa.....	Mellor & Meigs.....	226-228
HOSPITALS.		
Ohio Valley General Hospital, Wheeling, West Va.....	Edward F. Stevens.....	67
Bridgeport (Conn.) Hospital, Maternity Building.....	Edward F. Stevens.....	68-75
St. Luke's Hospital, Jacksonville, Fla.....	Edward F. Stevens, Mellen C. Greeley, Assoc.....	75-79

TYPES OF BUILDINGS ILLUSTRATED (Continued).

HOSPITALS.	ARCHITECT	PAGE
Barre (Vermont) City Hospital.....	Edward F. Stevens.....	80-81
Ross Pavilion, Royal Victoria Hospital, Montreal Can.	Stevens & Lee.....	82-83
Carter Memorial Hospital, Lancaster, Mass.....	Loring & Leland.....	332-337
HOTELS.		
New Monmouth Hotel, Spring Lake, N. J.....	Watson & Huckel.....	40-45
St. Louis Hotel, New Orleans.....		355
LIBRARIES.		
New York Public Library.....	Carrère & Hastings.....	277
Public Library at Waltham, Mass.....	Loring & Leland.....	320-331
MUNICIPAL AND STATE BUILDINGS.		
State Capitol at Salt Lake City, Utah.....	R. Kletting	172
Capitol at Washington.....		270
New York City Hall.....		299-319, 474-499, 513-535
PLAYHOUSES.		
At Country House of H. H. Rogers.....	Walker & Gillette.....	21
POST OFFICES.		
Waterville, Me.		369
Marietta, Ga.....		369
Brookings, So. Dak.....		370
San Juan, P. R.....		370
Minneapolis, Minn.		371
Paris, Texas		371
SCHOOLS AND ACADEMIES.		
Albany Academy		132-143, 247-264
American Academy in Rome.....	McKim, Mead & White.....	180-183
District School near Spokane.....	Whitehouse & Price.....	282-284
STUDIOS.		
Studio Building, Boston.....	Loring & Leland.....	368
TEA-HOUSES.		
Mrs. O. H. P. Belmont's Tea-House, Newport, R. I.....	Hunt & Hunt.....	499-512

ILLUSTRATIONS OF DETAILS

Ceilings	262, 427, 488
Chancels	288
Cornices	256
Courts	29, 182, 221
Cupolas	319
Domes	357, 518, 519
Doorways (Exterior) ..5, 41, 125, 129, 136, 138, 144, 22, 230, 236, 239, 282, 286, 320, 327,	405, 436, 452, 249, 257
Façades	163
Forecourts	103
Fountains	22, 120, 298, 413
Gardens	4, 9, 18, 24, 29, 113, 114, 118, 205, 215, 219, 228
Gates	124, 400, 401
Grilles.....	12, 45, 124, 125, 171, 202, 326, 428, 447, 479, 480
Interiors—	
Aisles	289
Banking Rooms	44, 445, 446, 447, 458, 459, 552, 553
Board of Estimate Room.....	479
Chapels	261, 415
Children's Room (Library).....	329
Corridors	67, 129, 365, 366
Council Chambers	468
Court Rooms	367
Dens	14
Dining Rooms	16, 52, 130, 131, 151, 165, 166, 204, 243, 336, 466, 558
Doors	63, 254, 258, 260, 410, 477, 522, 524, 525, 526
Drawing Rooms	164
Entrance Halls.....	January frontispiece, 13, 51, 148, 149, 202, 252, 556, 567
Fireplaces	225
Governor's Room	481, 484, 485
Gymnasium.....	414

ILLUSTRATIONS OF DETAILS (Continued).

PAGE

Halls	107, 108, 208, 241, 328, 398, 466, 559, 560, 562, 563, 566, 567
Hospital Wards	71, 72
Libraries	167, 203, 415, 471, 472
Living Rooms	52, 150, 209, 210, 221, 223, 399, 467, 468, 469, 561, 564, 565
Lobbies	May frontispiece, 411, 412
Main Room (Insurance)	170, 171
Mayor's Private Office	527
Music Rooms	110
Naves	287, 347, 423, 426, 428, 433
Operating Rooms	67, 73, 75, 159
President of the Board of Aldermen's Office	523
Reception Rooms	15, 521, 95
Rest Rooms	130
Salons	45
Social Rooms	409
Stairways	43, 109, 171, 465, 479, 559, 566
Sun Rooms	51, 336
Swimming Pools	408
Vaults	448
Vestibules	183, 410
Winter Gardens	111
Loggias	17, 115
Mantelpieces	16, 52, 60, 61, 62, 64, 164, 165, 167, 180, 204, 210, 221, 223, 225, 259, 261, 398, 399, 467, 468, 469, 472, 481, 482, 485, 489
Pergolas	119
Piazzas	327
Pools	18, 19, 27
Porches	104, 105, 556, 557
Porte-Cocheres	February frontispiece, 106
Porticos	315, 316
Rotundas	43, 44, 45, 515, 520
Sculpture	266, 277, 362, 363
Stairways (Exterior)	136, 226, 227
Terraces	12, 116, 200, 218, 237, 245
Towers	143, 404

ARCHITECTS REPRESENTED

NAME	HOME OFFICE	PAGE
Allen & Williams	New Haven, Conn.	360-367
Atterbury, Grosvenor	New York City	513-535
Clark, George A.	Pasadena, Cal.	280-281
Cooper & Bailey	Boston	291-392
D'Oench & Yost	New York City	46-48
Duhring, Okie & Ziegler	Philadelphia	36-38, 285-289
Gilchrist, Edmund B.	Philadelphia	31-35
Greeley, Mellen C.	Jacksonville, Fla.	75-79
Hapgood, Edward T.	Hartford, Conn.	168-171
Heun, Arthur	Chicago	97-121
Hewitt & Bottomley	New York City	162-167
Hoffman, F. B., Jr.	New York City	198-206
Holmes & Winslow	New York City	551-553
Howe, George, of Furness, Evans & Co.	Philadelphia	562-567
Howells & Stokes	New York City	154-160
Hunt & Hunt	New York City	499-512
Kletting, R.	Salt Lake City, Utah	172
Livingston, Goodhue	New York City	207-211
Lobo, Arthur	New York City	46-48
Lord, Hewlett & Tallant	New York City	372-376
Loring & Leland	Boston	320-337, 368
McGoodwin, Robert Rodes	Philadelphia	24-30
McKim, Mead & White	New York City	180-183
MacClure & Spahr	Pittsburgh	377-380
Maher, Geo. W.	Chicago	175-176
Mellor & Meigs	Philadelphia	212-245
Mundie & Jensen	Chicago	173-174
Phelps, Stowe	New York City	513-535

ARCHITECTS REPRESENTED (Continued).

NAME	HOME OFFICE	PAGE
Schmidt, Richard E., Garden & Martin	Chicago	144-153
Seeler, Edgar V.	Philadelphia	122-131
Sellers, Horace Wells.	Philadelphia	176-177
Sims, Joseph Patterson, of Furness, Evans & Co.	Philadelphia	466-473
Spahr, Albert H.	Pittsburgh	381-383
Stevens, Edward F.	Boston	67-81
Stevens & Lee.	Boston	82-83
Sullivan, Louis H.	Chicago	436-465
Tompkins, John	New York City	513-535
Walker & Gillette.	New York City	1-23
Warren & Clark.	New York City	554-557
Watson & Huckel.	Philadelphia	40-45
Whitehouse & Price.	Spokane, Wash.	282-284, 298
Willing, Chas., of Furness, Evans & Co.	Philadelphia	558-561



COVER—DOORWAY TO COUNTRY HOUSE OF H. H. ROGERS, Esq., Southampton, L. I.	Page
COUNTRY HOUSE OF H. H. ROGERS, Esq. : Walker & Gillette, Architects By John Taylor Boyd, Jr.	1
PASTORIUS PARK, PHILADELPHIA, AND ITS RESIDENTIAL DEVELOPMENT By Harold D. Eberlein	24
PORTFOLIO OF CURRENT ARCHITECTURE	40
COLONIAL ARCHITECTURE IN CONNECTICUT. Part V. Text and Measured Drawings by Wesley Sherwood Bessell	53
THE AMERICAN HOSPITAL DEVELOPMENT. Part II By Edward F. Stevens	65
PERSONAL REMINISCENCES OF CHARLES FOLLEN McKIM. Part III. McKim and the White House By Glenn Brown	84
THE ARCHITECT'S LIBRARY: Books on Colonial Architecture. Part II. Secular Buildings (Continued) By Richard F. Bach	89
NOTES AND COMMENTS	94

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ENTRANCE HALL AND STAIRS—COUNTRY
HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON,
L. I. WALKER & GILLETTE, ARCHITECTS.

THE ARCHITECTURAL RECORD

VOLUME XXXIX



NUMBER I

JANUARY, 1916

THE COUNTRY HOUSE OF H. H. ROGERS, ESQ

WALKER & GILLETTE ARCHITECTS

BY JOHN TAYLOR BOYD, JR



FEW among recent creations of American architecture will excite more interest than this latest work of Walker and Gillette, the house of Mr. H. H. Rogers, at Southampton, Long Island. This deserves our notice, because not only is it a perfectly wrought design of unusual merit in itself, but it brings to the front certain fundamental principles of mass and color at the root of the highest art. How is it that architects occasionally allow themselves to be so absorbed in the technique of form that they grow indifferent to the needs of color and of mass? In this respect, Messrs. Walker and Gillette have been of great service, in repeating the warning that technique is a means, not an end—a warning, moreover, which they have emphasized in such definite terms of three dimensions

that, unlike mere words, it cannot be very well ignored.

Southampton, an old American town, with nearly three centuries of history, lies along towards the eastern end of the island, about a mile from the sea, where the country is flat and rather sandy. The landscape of the district is one of dark wind-swept heaths and white dunes along the ocean, changing inland to a neighborhood of level farms. Because of these attractions and its soft sea-climate, which permits out-door life through the greater part of the year, Southampton has become well-known as a place of country residences.

Only a few of these houses front directly on the ocean, and one of them is the Rogers house. What a rare picture it presented when I saw it last autumn in

the soft October sunshine! Perched astride the dune, its roofs of a mellow deep claret red and walls of rich ochre gray, spotted with blue gray shutters, it stood out boldly against the blue sky. Along the crest of the dune the dark green beach grass tossed in the wind above the white sands, where the blue waves broke into glittering mist scarcely fifty yards away from the house. The whole scene, house, gardens and sunlight, seemed almost Italian, and the incessant wind reminded me of the gale in the oak trees of the Villa Farnese on the mountain top above Caprarola.

It was by thus braving the exposed situation that the owner attained a character and effect hardly to be acquired in the more placid neighborhood of Southampton village. I have said that the dunes form a rampart astride which is the house. This placing of the dwelling brings the first floor on a level with the top of the sloping beach, and allows the basement floor to be above ground on the north, at the garden level. Through this arrangement, the kitchen, laundry, etc., of the service wing, situated in the basement, obtain plenty of cheerful light and air. To protect the planting from the never-ceasing winds, high stucco terra cotta walls surround the gardens and traverse them at intervals, sub-dividing them into a series of courts. Around the outside walls, a screen of tree masses will still further shelter the shrubs and flowers, besides furnishing them with a background. One is struck with the unusual distinction of these high stucco walls, and wonders why they are not used oftener, for besides providing a background, the shadows of the foliage play on the wall surfaces with a fine sparkle of light and shade in the brilliant illumination of our summer sun. Such frequent use of walls adds a sense of comfort and protection, for through them the gardens acquire an intimate, cozy, sequestered air—the charm of old cloisters, of old religious enclosures. Yet there is nothing imitative about all this, since the protecting walls are a necessity of the wind-driven site.

The place provides a whole series of pictures, one after the other. It brought joy to the photographer, who could for-

get the injunction to "show the architecture clearly" and turn himself loose in his picture-making. The house is a succession of combinations in masses, shapes, colors and textures, with but little regard for architectural machinery. In fact, right here is the chief secret of Messrs. Walker and Gillette's success in the Rogers house. The architect may well be thankful when painters or photographers find in his achievements opportunities for the brush or the camera, for these artists will not be deceived by any correctness of architectural technique, or by elaboration of design; rather will they seek to eliminate or to suppress all details and aim for whatever fundamental design may be discovered in the architect's work. This is one of the chief necessities in architecture today—to maintain the painter's point of view, the painter's sense of the dramatic.

The free treatment of Mr. Rogers' house characterizes the plan as well. The scheme is symmetrical, but not obtrusively so, and the architecture is not forced upon the beholder. As you progress through the house from the main entrance, you are aware of axes, but not of balanced symmetry. Besides, the most symmetrical front of the house, the ocean front, is the one least seen. What impresses one is the bold treatment of symmetrical balance, the big striking contrasts; large openings and small ones, broad wall surfaces of fine texture relieved by bits of decoration in the shape of sculptured ornament, iron grilles, furniture and hangings, emphasizing and enriching the design, preventing baldness. This bold, honest treatment in mass and color, this skilled sense of form and refinement, this discard of conventional formulæ and of ostentation, this informality—the good sense and sentiment and gaiety of it all—are not these the qualities most precious to Americans? Such an effect of simplicity and informality with a dramatic effect—could we have anything better in architecture?

The numerous drawings reproduced in these pages illustrate admirably the principles of design outlined above. It will be seen that they represent little more than plain walls and door and window



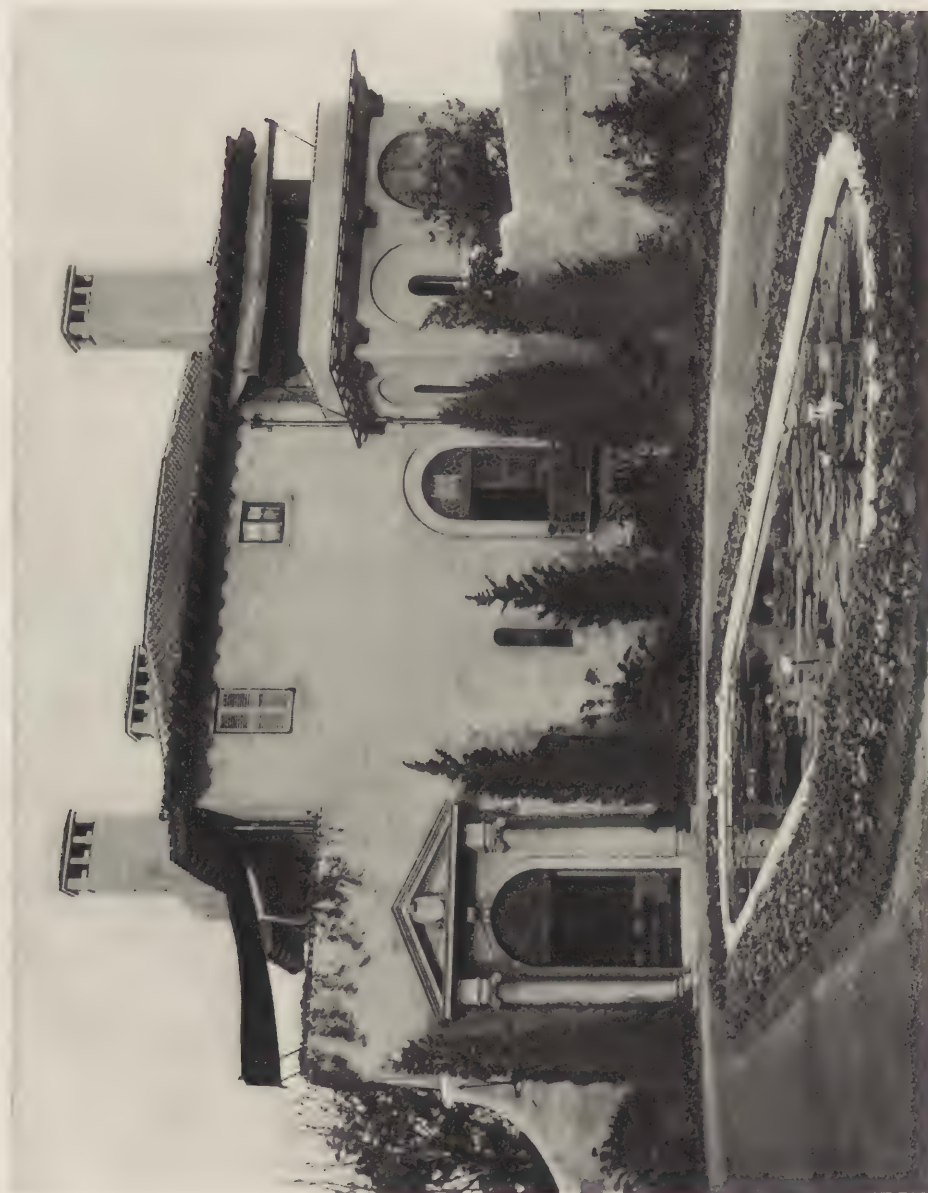
SOUTHWEST CORNER OF HOUSE SEEN FROM THE TOP OF
THE DUNE-COUNTRY HOUSE OF H. H. ROGERS, ESQ.,
SOUTHAMPTON, L. I. WALKER & GILLETTE, ARCHITECTS.



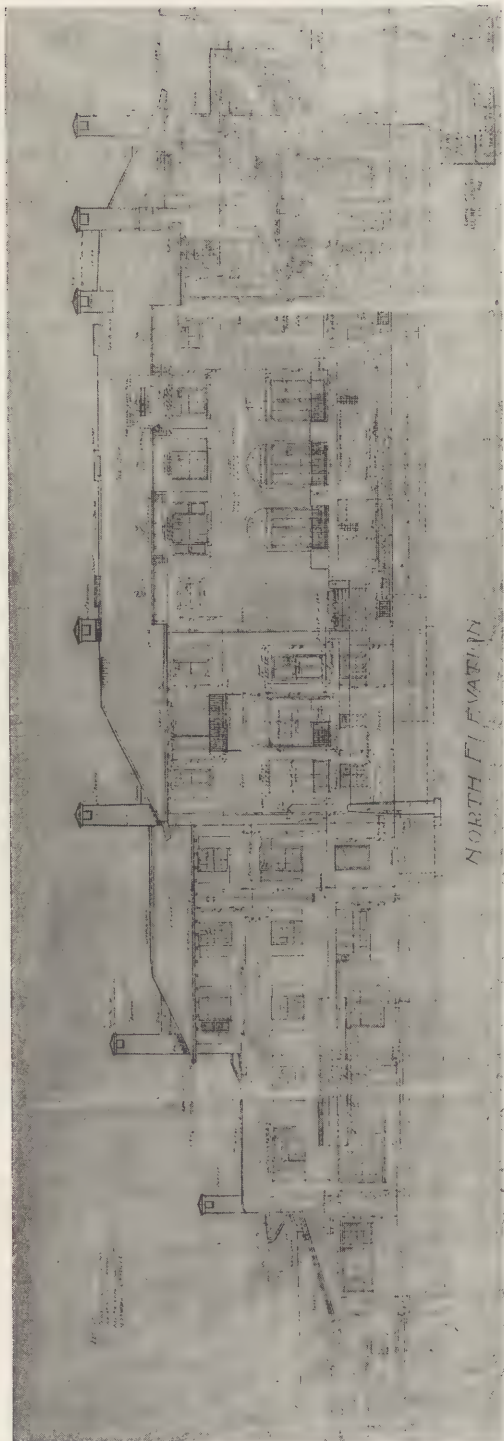
HOUSE, WALLS AND STABLES—VIEW PRESENTED IN APPROACHING THE COUNTRY PLACE
OF H. H. ROGERS, ESQ., SOUTHAMPTON, L. I.
Walker & Gillette, Architects.



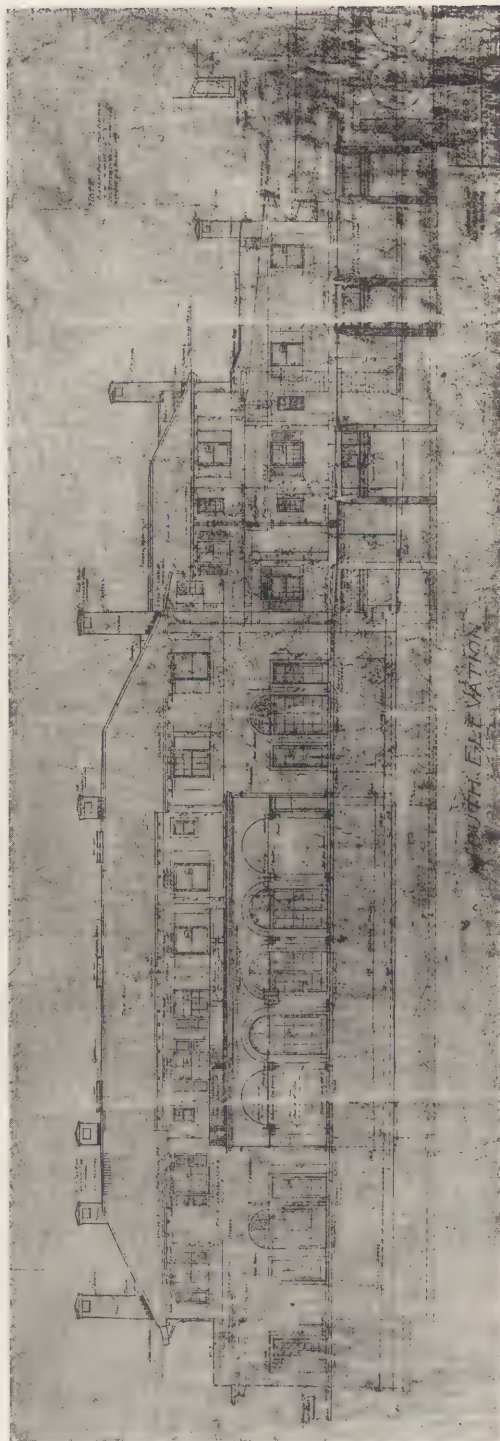
HOUSE AND FLOWER-GARDEN—COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON, L. I.
Walker & Gillette, Architects.



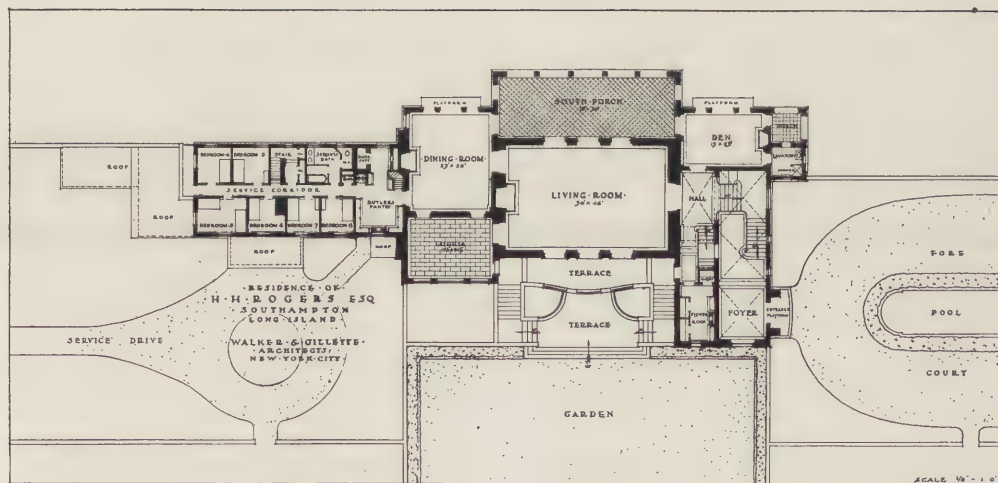
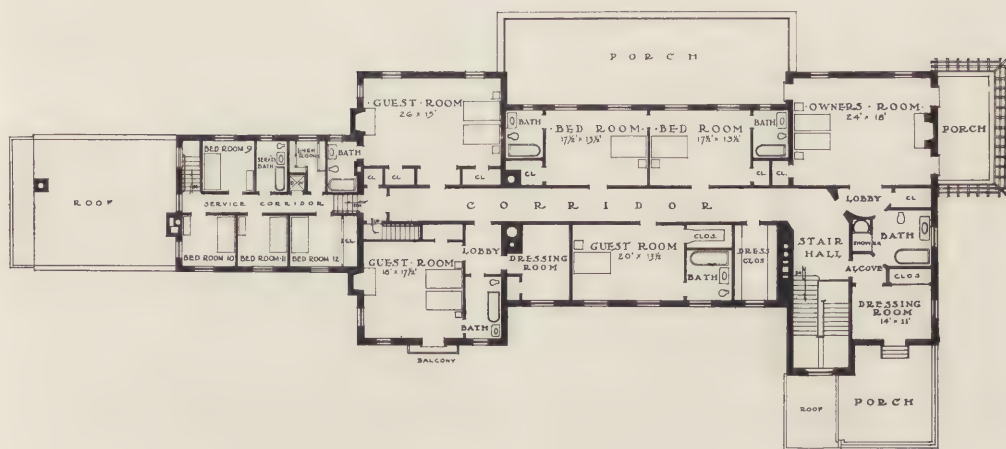
MAIN ENTRANCE ON THE WEST-COUNTRY
HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON,
L. I. WALKER & GILLETTE, ARCHITECTS.



NORTH ELEVATION ON GARDENS—COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON, L. I.
Walker & Gillette, Architects.



SOUTH ELEVATION ON OCEAN—COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON, L. I.
Walker & Gillette, Architects.



FLOOR PLANS—COUNTRY HOUSE OF
H. H. ROGERS, ESQ., SOUTHAMPTON,
L. I. WALKER & GILLETTE, ARCHITECTS.



WEST (ENTRANCE) ELEVATION, COMPARE PHOTOGRAPH ON PAGE FIVE—COUNTRY HOUSE OF
H. H. ROGERS, ESQ., SOUTHAMPTON, L. I.
Walker & Gillette, Architects.

openings. In this regard they will remind the readers of *The Architectural Record* of the simple drawings of McKim, Mead and White for the Harvard Club plunge published in the November issue. To a certain type of client, who loves display, they would be extremely disappointing, and on paper they would make but a sorry showing against a more conventional design of pilasters, cornices and ornament, elaborately drawn and tricked out. But as executed, as built, how infinitely superior they are! They prove the more ostentatious effects to be but idle glitter, mere soap-bubbles of architecture! 'Tis the old, old conflict between paper architecture and real architecture, a conflict which harasses both architect and client. Fortunately, the more discerning part of the public today is willing to accept a simple drawing from an architect, and to stand by him loyally in carrying it out in construction.

Of course, Walker and Gillette have not deserted tradition in the Rogers house. It provides reminiscences of very early Renaissance Italy, with many medieval touches and some high Renais-

sance ones. Its contrast of plain wall surfaces with sparkling bits of detail, its virility and dramatic effects are distinctly Spanish. But if this house were side by side with any villa in Italy, it would reveal more differences than appear at first glance—its American qualities would be brought out. For one thing, there are the more generous window openings, the lower story heights of the Rogers house, besides its greater air of comfort and hospitality, its atmosphere of an American home. Indeed, why may not Americans seek inspiration in the Middle Ages? Just as the Renaissance Italians turned to classic antiquity, so do moderns discover in themselves a real sympathy for the picturesqueness and the romance of medieval times.

How consistently the Rogers house embodies these principles! With the co-operation of architect and client, bits of sculpture, fragments of decoration and color, columns, fireplaces, etc., have been carefully selected and given a right place in the design. This is as true of the long expanse of garden walls as of the house itself. The gardens teem with odd bits

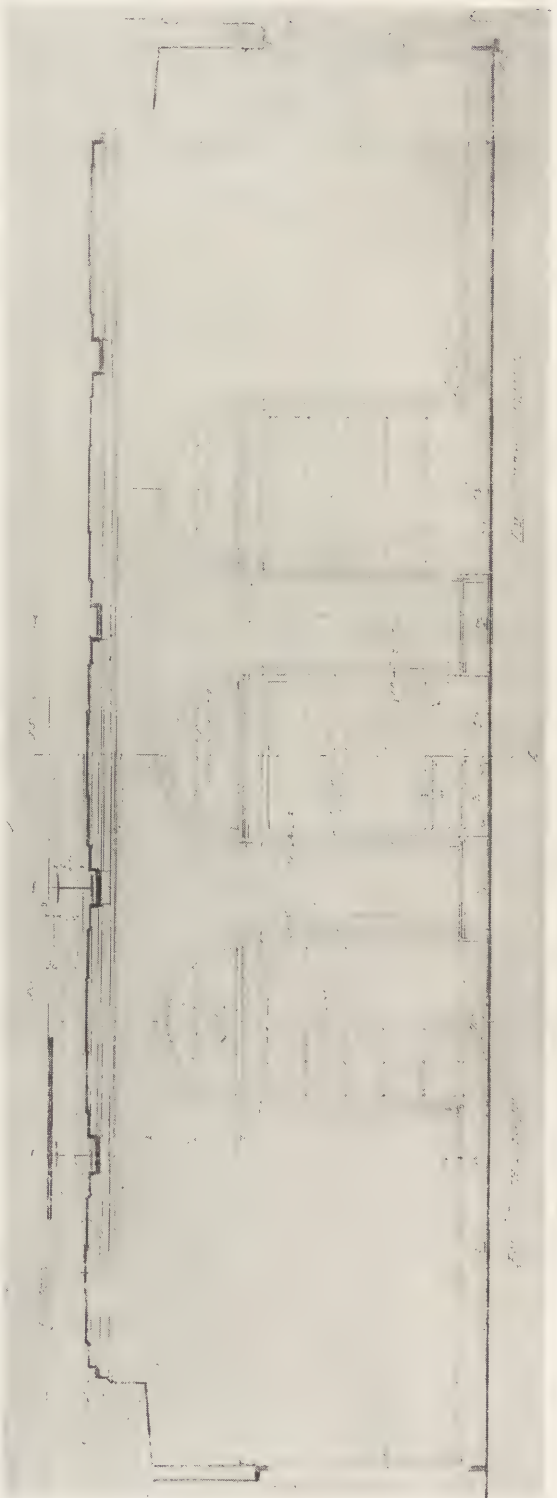


GARDEN ELEVATION ON NORTH-COUNTRY
HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON,
L. I. WALKER & GILLETTE, ARCHITECTS.

of interest, likewise all the interior decorations—furniture, hangings, art objects—have been chosen and built into the scheme of architecture to become an integral part of it, just enough to complete each room and nothing more. The result is a really impressive collection of art objects. One is reminded somewhat of Mrs. John L. Gardiner's Fenway house, in Boston, and also of the Davanzati palace in Florence, the opening of which to the public caused such a stir several years ago.

Let us consider the details. Approaching the house, the first impression is of the long west wall and the stable at one end, and the house at the other—a view of the whole estate. As we turn into the entrance court on the south, we notice a long pool with white marble curb in the foreground, beyond it the fine entrance doorway. This doorway is the main feature in an unsymmetrical elevation. The door itself is a heavy paneled, medieval-looking thing, as are all the doors in the first story of the house. (Incidentally, those who are interested in the technical side of the profession may care to refer to the files of *The Architectural Record* for April, 1914, containing a special article on the work of Walker and Gillette, and see how closely two excellent preliminary sketches have been followed out in the photographs of the completed work. These are the garden elevation of the house, illustrated as a head-piece on the first page of the article, and the pen-and-ink sketch on page 297, of this entrance court, on the west of the house.) Entering from the court, we find ourselves in a lower hall paved with tile, with walls of tinted plaster, somewhat the color of sandstone and spanned with an undecorated groin-vaulted ceiling. Off this entrance hall open two dressing suites for visitors, finished in tints of faded old rose. Unusual indeed is the main stairway of brick treads and risers, topped with an extremely simple iron rail.

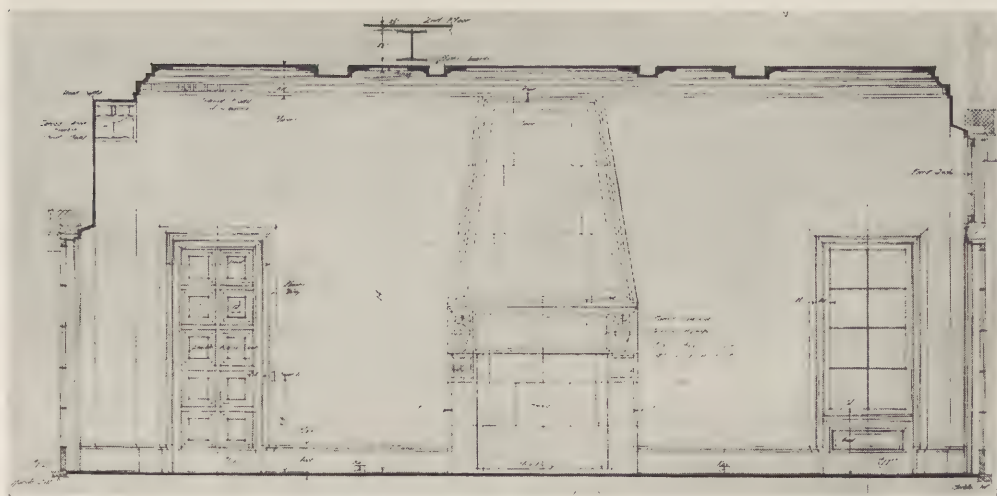
At the head of the stairs in the main floor is an attractive little den, decorated with an oak beamed ceiling, bookcases at one end, and a small fireplace of tall, whimsical design at the other. Here is a noteworthy feature of this little room: it



ELEVATION OF RECEPTION ROOM—COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON, L. I.
Walker & Gillette, Architects.



DETAIL OF RECEPTION ROOM CEILING—COUNTRY HOUSE OF H. H. ROGERS, ESQ.,
SOUTHAMPTON, L. I.
Walker & Gillette, Architects.



EAST ELEVATION OF DINING ROOM—COUNTRY HOUSE OF H. H. ROGERS, ESQ.,
SOUTHAMPTON, L. I.
Walker & Gillette, Architects.



DETAIL OF TERRACE ON MAIN AXIS OF GARDEN—
COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTH-
AMPTON, L. I. WALKER & GILLETTE, ARCHITECTS.



INTERIOR OF ENTRANCE HALL—COUNTRY
HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON,
L. I. WALKER & GILLETTE, ARCHITECTS.



DEN-COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTH-AMPTON, L. I. WALKER & GILLETTE, ARCHITECTS.



RECEPTION ROOM—COUNTRY HOUSE OF H. H. ROGERS, ESQ.,
SOUTHAMPTON, L. I. WALKER & GILLETTE, ARCHITECTS.



DINING ROOM, SHOWING FIREPLACE IN DRAWING REPRODUCED ON PAGE ELEVEN—COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON, L. I. WALKER & GILLETTE, ARCHITECTS.



NORTH LOGGIA OVERLOOKING GARDENS—COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON, L. I. WALKER & GILLETTE, ARCHITECTS.



VISTA ALONG MAIN AXIS OF GARDENS SHOWING POOL AT CROSS-AXIS—COUNTRY HOUSE
OF H. H. ROGERS, ESQ., SOUTHAMPTON, L. I.
Walker & Gillette, Architects.



GARDEN DETAIL—COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTHAMPTON, L. I.
Walker & Gillette, Architects.



FIGURE IN POOL AT THE CROSSING OF THE GARDEN
AXES—COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTH-
AMPTON, L. I. WALKER & GILLETTE, ARCHITECTS.

has not a bit of trim in it. The floor is laid with small hexagonal red tiles, with a tile base at the walls some 6 inches high, and above this base is a band of yellowish gray about 20 inches high. Instead of using wooden architraves, the panelbacks of the doors and windows are splayed back in the thickness of the walls, and painted gray with a gray edging around the opening. All the rest of the walls, except this gray base and the gray strip around the doors and windows, are a deep rich blue. In fact blue, of one shade or another, is the color one notices most in the house, which has indeed a great variety of color. The dimensions of this room are 21 feet by 14 feet 8 inches, with clear ceiling height of 14 feet 4 inches.

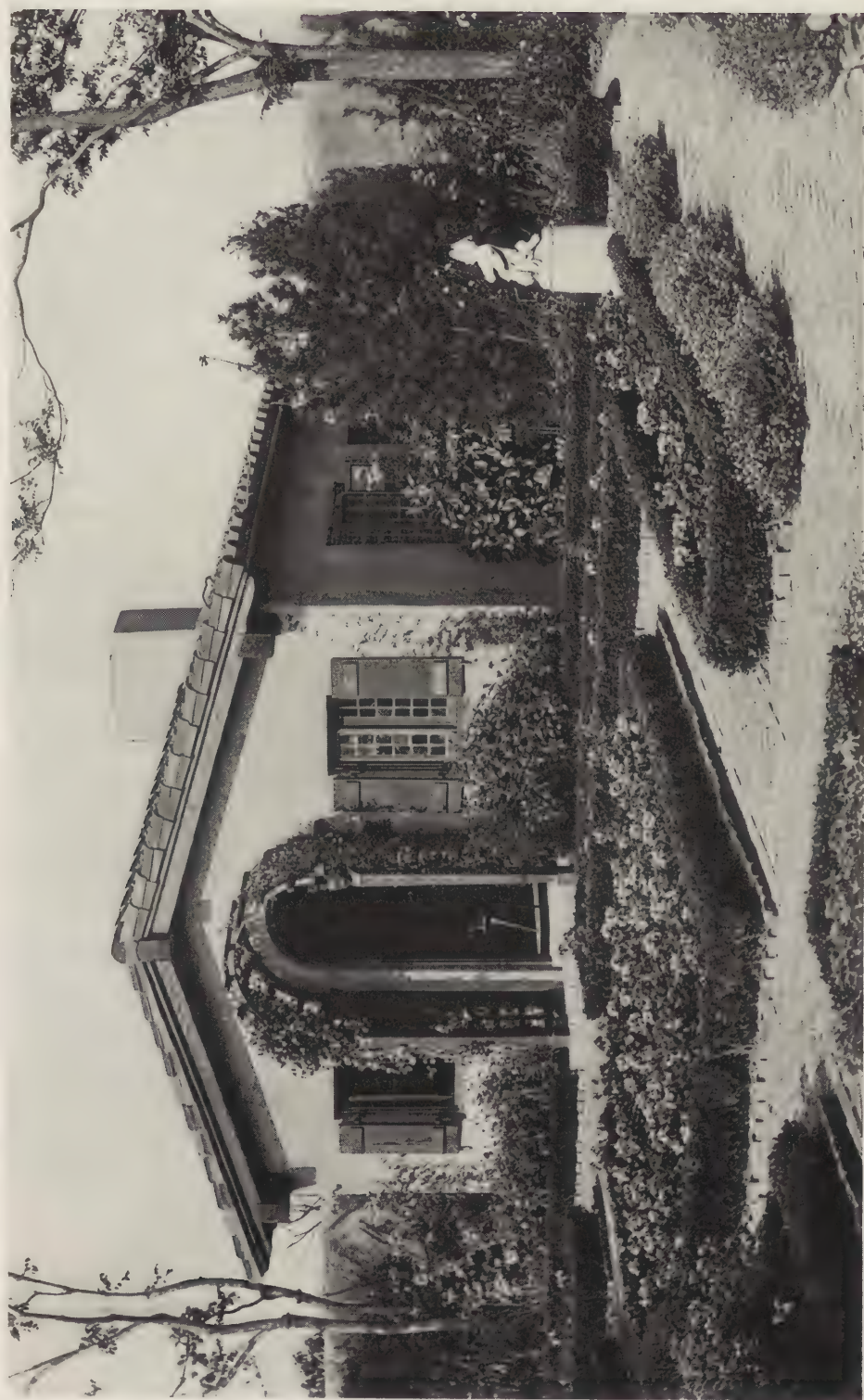
Also at the head of the stairs do we find the large reception room, the windows of which look south on the sea and north over the main axis of the garden. There is a long oak table down the centre of the room, and at the opposite end a large old stone hooded fireplace, brought from Italy. The floor is of oak. Unusually effective, the ceiling of this drawing room is paneled in squares, three across the room and five the length of it, of oak and plaster, very dark, picked out in deep colors. The hangings and furniture coverings are of a soft clear blue of medium value, with faint gold threads running through the material. The walls are plaster tinted somewhat the color of sandstone. The dining room has much the same treatment as the reception room—plaster walls, oak ceilings, marble fireplace and oak floors. The dimensions of the reception room are 44 feet 4 inches by 29 feet 3 inches, with clear height of 14 feet 2 inches; of the dining room, 29 feet 4 inches by 24 feet, height 14 feet.

These are the principal rooms and well do they typify the spirit of the whole design. In them the architecture is subdued to make a background for the furniture and hangings—without any competition between the two. It is a principle that is coming more and more into modern art, though it is as old as anything we know. What a sense of rest these rooms give us! What harmony of color and of form! No spottiness, no ostentation, no surfeit anywhere.

As part of the main floor layout are the two loggias, opening off the main rooms south and north, which are more traditional than most of the Rogers house. The south loggia overlooking the sea has a red tile floor and elliptical vaulted ceiling with penetrations, painted a light clear blue. This blue field is relieved by the narrowest of white vault ribs and medallions showing the signs of the Zodiac. Delightful indeed is the north loggia, overlooking the garden, to the left of the main axis, the walls of which are covered with some remarkable frescoes.

In the bedroom floor it is not surprising to find a slight change of character. Heavy oak tables and chairs would be something of a nuisance in bedrooms, and there is provided instead simple, graceful modern furniture, painted in the lightest of tones. The rooms themselves show a surprisingly simple, uniform treatment; delicate trims, a slight "picture" mould, painted blue—from which pictures do not hang—and a 6 inch cove above the picture mould at the ceiling, of which the clear height is 9 feet. The usual mantelpiece treatment is missing; instead the small fireplaces are merely openings in the face of the plaster wall, edged with vitrified figured tile, and built with a raised cement hearth and a little shelf supported on four brackets above the opening. The door and window trims are detailed with a flat band, which is tinted a rich blue or else decorated in a flower pattern, to harmonize with the painted furniture. All the rest of the trim is a strong gray and the plaster walls are painted in extremely light tones. Altogether, it would be impossible to exaggerate the good taste of these bedrooms.

In such a design of large plane surfaces, careful treatment of texture is absolutely a necessity. The tile, ironwork and woodwork of the house and gardens are all selected to this end. Inside, the plaster walls have a texture somewhat resembling that of painted burlap or the very roughest water color paper. As for the outside, to equal the tile roofs, one must visit Segovia or Salamanca in Northern Spain, where perhaps the finest roof tiles in the world are found; and it is interesting to learn that the architects have even gone so far as to soften



PLAYHOUSE IN CHILDREN'S GARDEN, CLOSING EAST END
OF CROSS-AXIS-COUNTRY HOUSE OF H. H. ROGERS, ESQ.,
SOUTHAMPTON, L. I. WALKER & GILLETTE, ARCHITECTS.



FOUNTAIN IN THE LOGGIA WHICH CLOSES THE
CROSS-AXIS OF THE GARDENS ON THE WEST-
COUNTRY HOUSE OF H. H. ROGERS, ESQ., SOUTHAMP-
TON, L. I. WALKER & GILLETTE, ARCHITECTS.

the lines of the roof by making them slightly uneven, as if they had become wavy through age. The photographs give some idea of the effective finish of the stucco walls, and, as a further example of this careful attention to detail, the ironwork has been hand wrought by Belgian workmen.

A slight notice of the gardens completes the description of the Rogers house. The design was supervised by the architects, and the planting is the work of Mr. Gallagher of the Olmstead Brothers' firm of landscape architects, of Brookline, Mass. I have mentioned the situation on level ground to the north of the house, and the big stucco walls that surround and intersect the planting. There are really three long parallel axes that lead down from the house, divided by these high enclosures. The main axis, on the reception room of the house, shows an expanse of greensward, with a large pool in the centre of the nearest court, marking the cross-axis. The west parallel axis runs from a gate in the entrance court, and follows through a series of de-

lightful flower gardens of intricate geometrical paths, in delicate scale, where a multitude of dainty, reed-like Gothic columns about 6 feet high are outlined admirably against the foliage and flowers. In contrast to the other two long vistas, the third parallel axis, opposite the service wing, is cut up into three cozy little square enclosures beyond the service court from which they are separated. First is a little grass court called the croquet garden; next, at the cross-axis, an exquisite garden of roses and cedars; and further on, a children's garden with a quaint playhouse in it.

All this work, house and gardens, is conceived in the spirit of true architecture. The practical needs are completely fulfilled, and are expressed in terms of mass, shapes, colors, and textures, in the most perfect way. Fortunately the day of architecture copied from books and "examples" is passing, and we are glad to hail a work so free, so sure, and so splendidly dramatic. There is nothing so difficult as to be dramatic, without ever being theatrical.





MIDDLE AND LOWER GARDEN—GROUP OF THREE
RELATED HOUSES ON WILLOW GROVE AVENUE.
ROBERT RODES McGOODWIN, ARCHITECT.



PASTORIUS PARK, PHILADELPHIA AND ITS RESIDENTIAL DEVELOPMENT

BY HAROLD D. EBERLEIN

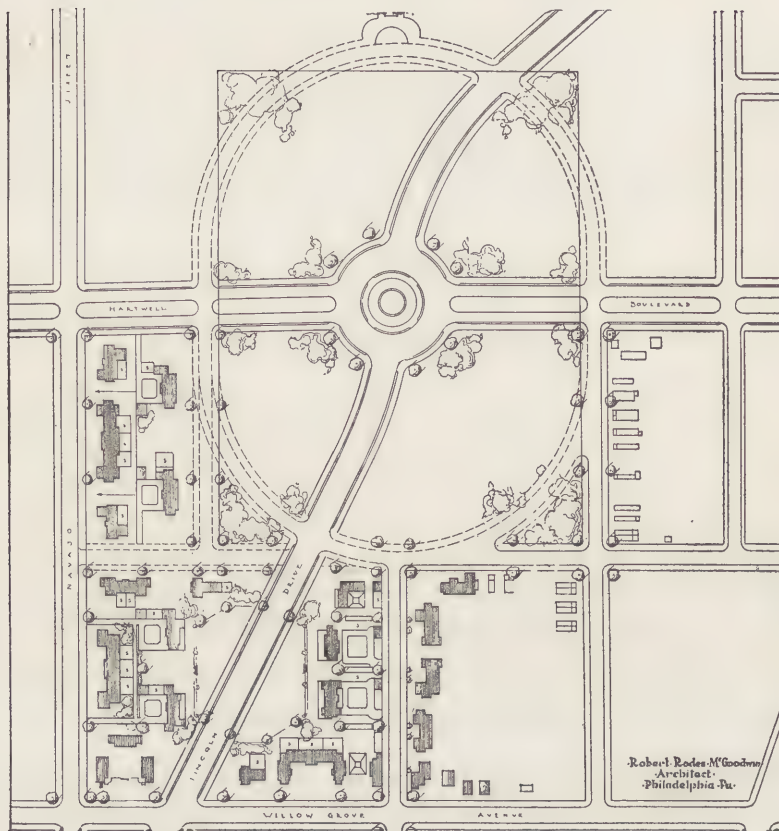


THE creation of Pastorius Park, St. Martins, Philadelphia, along with the erection of adjacent dwellings, affords a threefold opportunity for profitable study, highly significant from the aspect of city planning in connection with coherent residential development. The scheme of development supplies, in the first place, an admirable instance of a comprehensive plan to eliminate an ugly suburban slum and make what has been, until recently, an unprepossessing tract of untilled farm land into an engaging garden spot, eventually to be incorporated in the chain of the city park system, whose upkeep is under the charge of the park commissioners. Conditions of local topography have marked this tract for the intersection of two important thoroughfares, bound, before long, to be main arteries of a constant flow of inter-suburban traffic and the provisions adopted were studied with a provident view to future requirements as well as present desiderata.

In the second place, the plan of Pastorius Park and the adjacent houses shows a well considered scheme of erecting on the land abutting upon the edges of the park a suitable and original environment of dwellings. The scheme adopted, and already partly realized, incorporates certain features that have not hitherto figured, so far as we are aware, in any previous American building development of a similar nature. Finally, the Pastorius Park development gives an opportunity to see three architects working

independently but concurrently upon the plans of surrounding dwellings in such a manner that there may be sufficient architectural unity, when all the buildings are completed, to ensure the ultimate agreeable aspect of the park environment. While each architect enjoys considerable liberty in the choice of expression, so that his individuality of interpretation is not curtailed, it is so arranged, through amicable collaboration, that there shall be in the final *ensemble* neither jarring inconsistencies nor disappointing incongruities.

How the plan for the park came into being, and how the scheme was evolved to have all the neighboring houses designed to compose a coherent architectural *ensemble*, is a story not without an interest of its own. Besides showing how a large and far-reaching result can often come about from the determination to embody in tangible form the passing chance inspiration of a moment, it outlines the steps by which a practical realization was arrived at and affords an insight into conditions necessary to a clear understanding of the development. The idea for the park was born in London. Several years ago, the gentleman to whose energetic initiative, public-spirit and far-sightedness the inception and vigorous prosecution of the scheme are wholly due, chanced to be stopping at the Hyde Park Hotel in Knightsbridge and, looking out over the park, set with its refreshing greenery in the midst of the surrounding city, was seized with the idea of carrying out at St. Martins, Philadelphia, the prin-



PLAN OF PASTORIUS PARK AND HOUSES ON LAND ADJACENT.*

ciple of a dwelling-surrounded park as an important constructive measure of city beautification. Conditions were ripe for the furtherance of such a project, although there were several very material obstacles to be overcome before it could be brought to a successful issue. The tract of land that logically suggested itself for conversion into a small park was bound eventually to be built upon in the natural course of the city's growth unless some plan was immediately adopted to reserve it as a breathing space. Fortunately there were buildings upon only a small part of it, and they were of such a character that their preservation would have been a detriment to the neighborhood. The rest of the land—the tract comprised within the limits of Pastorius Park is altogether about thirteen and a half acres—had ceased to be used for farm purposes because of city

encroachment and was idly producing a luxuriant crop of weeds and brambles. Part of it was considerably lower than the grade which the city survey required for several streets that were about to be cut through, so that the arrival of trains of dump wagons was imminent.

But there were considerations that invited the creation of a small park at this point. Hartwell Lane traversed it from east to west just about the middle and Hartwell Lane, when certain pending improvements were carried out, was bound to become the main artery of communication between Chestnut Hill and the Whitemarsh Valley region, on the one hand, and Bryn Mawr, Haverford, Merion, Radnor, and all the numerous chain

*The plan of the park is that adopted by all three architects. The location of houses in this diagram is the suggestion of Mr. McGoodwin, individually. Substantial changes have been made by Mr. Duhring and Mr. Gilchrist in the grouping of their houses.



DIVERTED BROOK—PASTORIUS PARK.
H. L. Duhring, Jr., Architect.



SPRINGHOUSE AND POOL—PASTORIUS PARK.
H. L. Duhring, Jr., Architect.



NORTH AND SOUTH ELEVATIONS AND GROUND FLOOR PLAN—MIDDLE HOUSE OF RELATED GROUP ON WILLOW GROVE AVENUE. ROBERT RODES MCGOODWIN, ARCHITECT.



COMMON COURTYARD—GROUP OF THREE RELATED HOUSES ON WILLOW GROVE AVENUE.
Robert Rodes McGoodwin, Architect.



FROM LOWER OR SUNKEN GARDEN—GROUP OF THREE RELATED HOUSES ON WILLOW GROVE AVENUE.
Robert Rodes McGoodwin, Architect.



GROUP OF HOUSES NEAR PARK—CREFELDT STREET, ST. MARTINS.

Robert Rodes McGoodwin, Architect.

of residential settlements along the main line of the Pennsylvania Railroad in the old Welsh Barony tract, on the other. The Lincoln Drive, a boulevard which extended from Fairmount Park towards Chestnut Hill, was to cut through part of the tract and come to a dead end at a street nearby—a blundering, ill-planned and meaningless termination for an important boulevard. According to the contour map of the land, much of it was below the prescribed grade, but, as an offset to this, the conformation made a gently sloping amphitheatre, there were some fine old trees, a good brook and a spacious old springhouse—all of them destined to go if the city grade plans, as they then stood, were to be carried out.

The constructive plan evolved, in response to the considerations just noted, contemplated preserving the natural features as they then existed and turning them to the best account. The amphitheatre-like contour of the land was to be retained, the course of the brook was

to be cleared of obstructions, the trees were to be saved and the springhouse was to be repaired and made the centre of a pleasing water feature. Lincoln Drive was to be given a better and more reasonable course that would bring its terminus to the Germantown Road nearly opposite the point where another great highway, the Bethlehem Pike, branches off, so that a continuous boulevard, stretching for miles into the Whitemarsh Valley and beyond, would be assured. The intersection of Hartwell Lane and the Lincoln Drive was to be made in the centre of the proposed park.

The chief obstacles to be overcome before this scheme could be adopted consisted of inducing the various city authorities to consent to the revision of the plans for Lincoln Drive, although the new plan was far more logical and better served the purposes of traffic; the abandonment of certain grade provisions, and, finally, the appropriation of the necessary funds to condemn and remove two



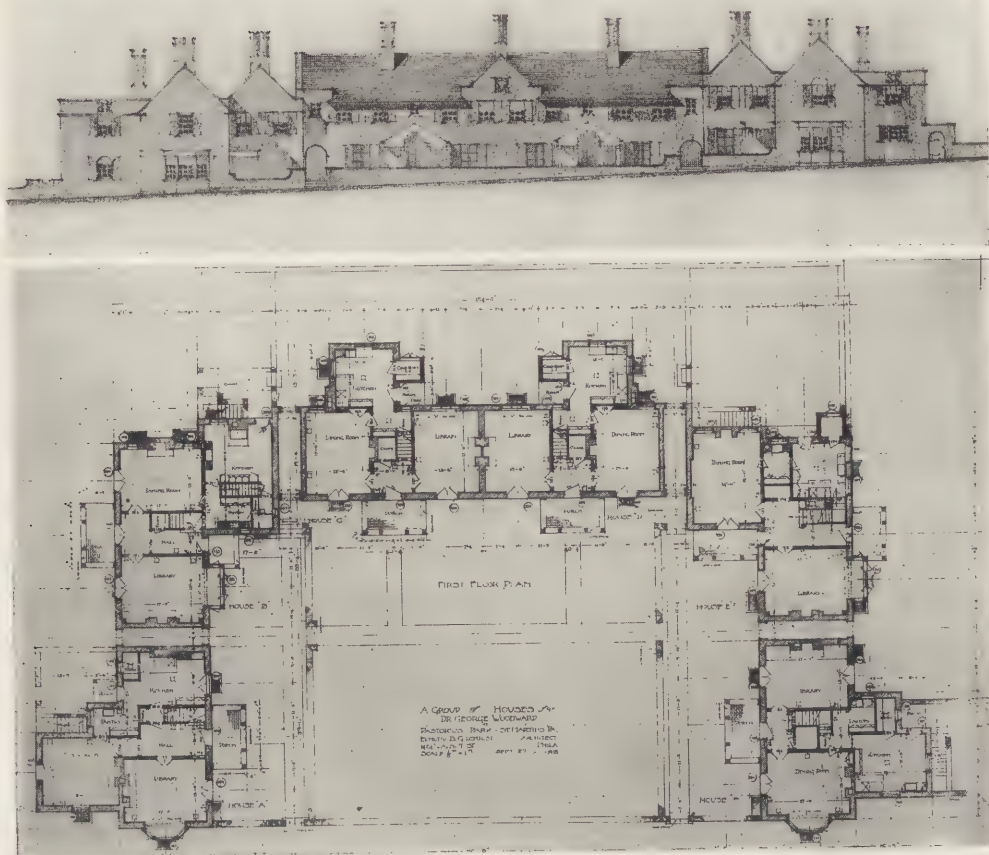
HOUSE AT CREFELDT STREET AND WILLOW GROVE AVENUE—ADJACENT TO PASTORIUS PARK.
Edmund B. Gilchrist, Architect.

rows of small houses—one of them little better than a slum, and thoroughly unsightly and undesirable—that had been built about twenty or twenty-five years ago on the lines of two then proposed streets. These undesirable dwellings and their yards occupied in all about two acres.

All difficulties, however, were surmounted. Sundry objections that had been raised were withdrawn. The modification in the course of the Lincoln Drive and its extension for a slight additional distance were approved, consent was secured to retain the natural contour of the land and funds were appropriated to condemn and remove the existing small houses and to make the necessary expenditures for street building in the case of the Drive and Hartwell Lane. The appropriation of the requisite remaining acreage for the park was a comparatively simple matter, as the land was all in the possession of two owners who were heartily in sympathy with the project, one of them being the gentleman already

mentioned who had conceived the whole scheme. The actual work of construction was then ready to be entered upon.

It was designed that the residential development adjoining the park should consist of houses of moderate size and moderate cost or rental. Notwithstanding this requirement, it was determined that they should be of sterling architectural merit. This was quite as much of a *sine qua non* as the first consideration. In the experience gained through other houses erected in the vicinity within the past decade, it had been thoroughly proved that houses of this character were constantly in demand, while the houses that had been built in the manner employed by the ordinary speculative builder went a-begging. Tenants or purchasers, as the case might be, demanded dwellings possessed of some individuality and architectural worth and were not satisfied with the jerry-built rows or semi-detached structures all patterned after the same banal plan. They had shown an unmistakable preference for the better planned



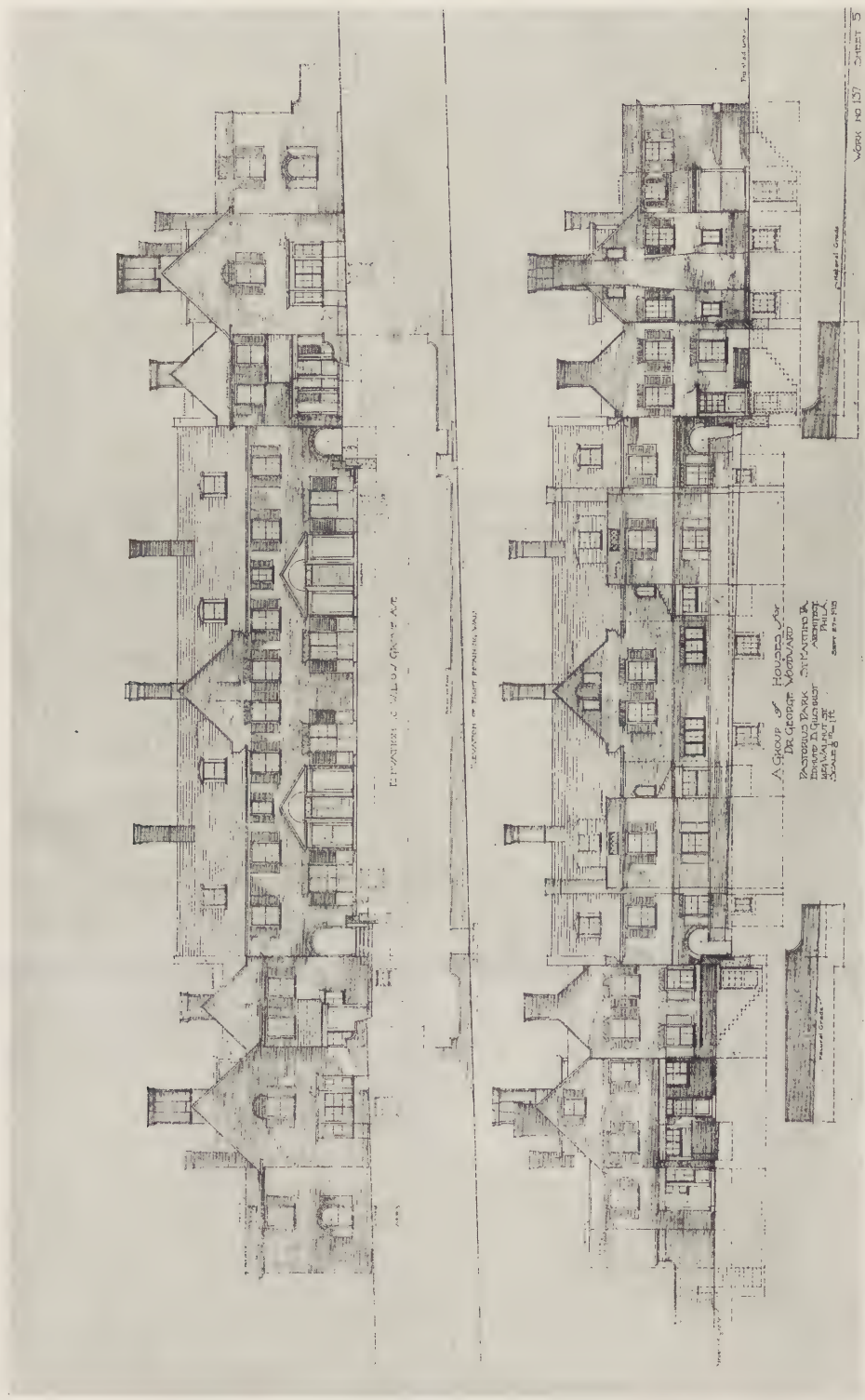
ELEVATION AND GROUND FLOOR PLAN—CONTIGUOUS GROUP ABOUT QUADRANGLE, WILLOW GROVE AVENUE.

Edmund B. Gilchrist, Architect.

houses designed with some consideration for architectural amenity, even when they had to pay somewhat more for them. A notable case in point was to be seen in the quadruple houses, designed by Messrs. Duhring, Okie and Ziegler, fully described in *The Architectural Record* of July, 1913. At that time, these houses rented for forty dollars a month, they were all occupied, and there was a waiting list of eager applicants. At the same time there was, less than a block distant, and in a thoroughly desirable neighborhood, a row of houses of the usual speculative builder's operation type, renting for thirty dollars a month, only two of which were occupied. The determination, therefore, to make the houses in the residential development of the tract ad-

jacent to Pastorius Park architecturally worth while was fully justified by sound business considerations and was not a chimerical project of merely idealistic origin.

Besides Herman Louis Duhring, Jr., of Messrs. Duhring, Okie and Ziegler, two other architects, Edmund B. Gilchrist and Robert Rodes McGoodwin, had previously designed a number of houses in the neighborhood for the sponsor of Pastorius Park and the building development of the ground adjacent to its borders. These three architects were chosen to develop a scheme for the treatment of the park itself and to plot the location of houses to be built around it. They were also to design the houses, each architect taking different groups to develop accord-



NORTH AND SOUTH ELEVATIONS—CONTIGUOUS GROUP ABOUT QUADRANGLE, WILLOW GROVE AVENUE, EDMUND B. GILCHRIST, ARCHITECT.

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HOUSE ON CREFELDT STREET, ST. MARTINS—NEAR PASTORIUS PARK.
Edmund B. Gilchrist, Architect.

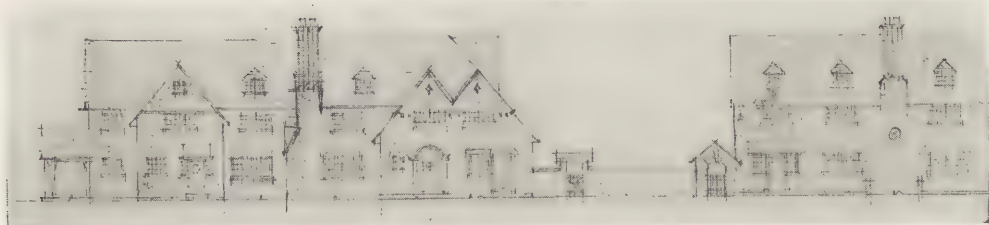
ing to his conception. The houses, therefore, do not represent collaboration further than an adherence to a general and somewhat elastic outline of requirements, sufficient to ensure an harmonious result in the aggregate. Ample scope was thus given for individual initiative and originality in the treatment of the several groups.

The first thing to settle was the laying out of the park. Hartwell Lane crossed it in a straight line in the middle. Lincoln Drive entered the lower end at a diagonal, crossed Hartwell Lane in the middle, curved slightly in the upper portion as it skirted the foot of a rise, and passed out at practically the same angle at which it had entered. A plan for the park and the location of the proposed houses on the adjacent land had been submitted by a prominent firm of landscape architects, but it was perfunctory and lacking in character and was set aside as entirely inadequate to the situation. Each of the three architects, already named, then prepared plans and the scheme finally adopted represents the work of all three, arrived at by frequent

conference and the weighing of all questions of expediency. The constructive work so far achieved in the park, outside of the road building now under way, is the reclamation of the springhouse, of which, with its adjoining sunken pool and the entering brook, there are several accompanying illustrations. Mr. Duhring was especially interested in saving the springhouse and the trees near by, all of which would have been swept away had the city's original grade plan been adhered to, while the brook would have been buried in a sewer. The springhouse needed but little repair, a slight diversion was made in the course of the brook, and at a trifling expense for digging a pool and laying up dry retaining walls of native stone an enlivening water feature of permanent value was secured. It was a simple matter to grasp opportunities offered ready at hand and make the most of them, as was done in this case, but too often such opportunities provided by nature are wholly ignored or brushed aside to make way for some preconceived scheme that oftentimes has not nearly the same merit as the unspoiled natural con-



HOUSES NEAR CREFELDT STREET—ADJACENT TO PAS-
TORIUS PARK. EDMUND B. GILCHRIST, ARCHITECT.



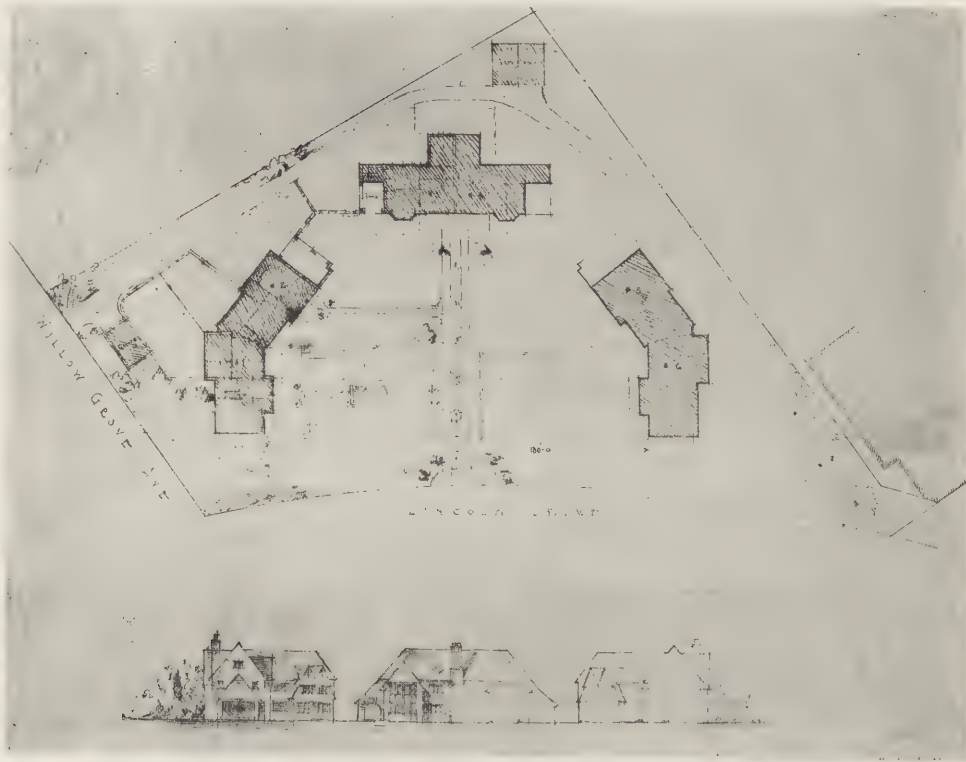
ELEVATIONS OF PROPOSED HOUSES—PASTORIUS PARK DEVELOPMENT.
 Duhring, Okie & Ziegler, Architects.

ditions. Mention is therefore due the commendable wisdom displayed in keeping and improving a good thing already on the spot, although it might not accord with the plan for a formal, and too often dull, park area.

The groups of houses, in connection with the residential development of the park, already finished, under actual construction or planned to be started in the immediate future, present features that are unusual and, for that reason, deserving of special study. In the group of three houses, at the junction of Willow Grove Avenue and the Lincoln Drive, the architect has taken advantage of the slope of the ground to create an interesting arrangement of three levels in the form of a sunken garden, a middle terrace, on which stand the two forward houses, and an upper terrace, on which is the house farthest removed from the street. The retaining walls that separate, the steps and the random paving of the garden walks are all made of the same native grey Chestnut Hill stone as is used in the quarry-faced rubble walls of the houses. The accompanying illustrations and the plan on page twenty-six (which has been somewhat changed in actual execution), will fully make clear the manner in which the three separate dwellings are built around three sides of an open quadrangle or courtyard, the middle level with its random paved walks and central pool forming a common lawn expanse for all three. Indeed, the whole garden area on all three levels belongs to all the houses in common and constitutes one of the most admirable features of this group arrangement. The satisfactory upkeep, of course, implies a reasonable degree of neighborly co-operation on the part of the occupants of all three houses, but it is

surely not too much to hope for such co-operation when, in return, it is possible for each tenant to enjoy a freer, better and larger expanse of garden than if each dwelling were pent up in its own small plot with the usual "shinny-on-your-own side" aspect conveyed by too many enclosures about suburban houses. This communal grouping of houses about a central garden plot is frankly an experiment, but it is, apparently, an important move in the right direction and ought to work out satisfactorily, if we may judge by the results of similar planning in England. It seems not unreasonable to expect that well-bred American citizens should be neither more disposed to contentions nor more incapable of neighborly co-operation than our British cousins.

Quite apart from all aesthetic considerations and questions of suitable garden care and supervision, the group is well contrived. Privacy is assured in the garden in a manner altogether impossible where houses are planned with "fronts" and "backs," whose characteristics could by no chance be mistaken or confused. The "front" garden is obtrusively a front garden and everything that goes on in it is patently on exhibition for the public eye unless there happens to be a high protecting hedge, which is all too rarely the case. In the group under present consideration the foolish distinctions of "front" and "back" have happily been eliminated. Each house is set quite at the edge of the property, abutting upon either a street or a driveway, thus permitting easy ingress and egress without trenching upon the privacy of the common garden. At the same time, this method of placing reserves the greatest possible amount of space for legitimate garden



GROUND PLAN—HOUSES AT LINCOLN DRIVE AND WILLOW GROVE AVENUE.
Duhring, Okie & Ziegler, Architects.

purposes and none of it is frittered away in meaningless and picayune "front yards" which are neither beautiful nor practical. An examination of the floor plans will show that, in every case, hallways, kitchens, pantries and the like have been put on the entrance side, while the pleasantest rooms in which the members of the family chiefly live are placed on the garden side and so arranged that they have the most cheerful exposure and most agreeable outlook. The service yards and clothes-drying enclosures are well masked behind stone walls so that their presence is not at all conspicuous. The houses themselves, of a composite Anglo-Flemish type, are decidedly interesting in mass and detail and their plan also is deserving of attention, but on this particular occasion the arrangement and treatment by groups is more significant and more germane to the purpose in hand.

Just beyond Lincoln Drive, and on the same side of Willow Grove Avenue, is a group of houses, designed by Mr. Gil-

christ, now in course of erection. The elevations and first floor plans are shown on pages thirty-one to thirty-five. The houses are six in number and they are all adjoining. But they are not in a stupid straight row, and by this departure from customary usage, Mr. Gilchrist has struck an entirely new note in the American practice of designing small contiguous dwellings. It is this very fact and the fact of the groupings planned by Mr. Duhring and Mr. McGoodwin for the houses they have built or are building that make it highly desirable to study the Pastorius Park residential development now, in its unfinished state, instead of waiting till it is all done and ready to be discussed from an architecturally critical point of view. Mr. Gilchrist's houses are just above ground; some of Mr. Duhring's and Mr. McGoodwin's show scarcely more than the cellar excavations and all three have still other groups planned for locations where ground has not yet been broken. Everyone of the sin-



GROUND FLOOR PLAN—HOUSES IN PASTORIUS PARK DEVELOPMENT.

Duhring, Okie & Ziegler, Architects.

gle houses or groups has abundant architectural interest—a glance at the sketches, elevations and halftones will show this—which will come up for discussion in due time, but for present study our point of chief concern is with the manner in which the problem of an extensive residential development has been approached and the scheme of grouping adopted.

In other large developments, either under the control of a single interest or else fostered by allied interests so that some general constructive and harmonious plan could be followed, there have been single houses, twin houses, apartment houses and various other types of abode, all decently arranged with trim gardens and so disposed as to put the best foot forward and keep the too often slatternly side of the back door life concealed from public gaze, but they have all toed the mark of cut and dried convention and fronted at intervals, regular or irregular, upon roads straight or winding. The effect has been not altogether unlike that of the so-called model English villages where "everybody's good and everybody's happy," and, one might add, where every-

body's a bit dull and uninteresting too. Now the architects who planned these suburban or rustic plots of elysian bliss may not have been inspired to do otherwise with their general scheme, or they may have been hindered by restrictive building laws or hampered by narrow and unsympathetic views on the part of the financial factor. At any rate, the three architects represented in the residential development of the land adjoining Pastorius Park have done something entirely new, for which they deserve full acknowledgment. It is not a small thing that they have collaborated so successfully to secure ultimate unity of result while each, at the same time, has maintained his own individuality, but the chief thing is the revolutionary and vital element they have introduced, by their system of closely related groups and contiguous massing about three sides of a quadrangle, each group or mass considered as a unit in the general scheme, which is bound to have its effect upon future developments of suburban building. The sponsor of Pastorius Park also must be thanked for a ready and supporting sympathy with the plans evolved. The contiguous massing of dwellings about three sides of a quadrangle and the grouping of separate houses about a common garden have precedents in English work, but the inspiration drawn thence has been modified and judiciously adapted to local needs. This adaptation and the novelty of the principle in American practice, pregnant as it is with suggestive ideas susceptible of future application in sundry beneficial ways, constitutes an ample justification for considering the work before it reaches completion.

To return once more to a particular inspection of Mr. Gilchrist's group on Willow Grove Avenue, the dimensions and floor plans should be carefully noted. Each of the two houses forming the far side of the quadrangle has a frontage of about forty feet. When we consider, however, that the depth, exclusive of the kitchen extension, is only seventeen feet, and reckon up the floor space in square feet, we must account them as houses of very moderate size. Hitherto suburban houses of a like floor space have almost invaria-

bly been built in twin blocks and have rarely presented an attractive appearance either inside or out. City houses of the like square foot area would have been jammed in a solid row with uncompromisingly ugly exteriors and ill-planned, ill-lighted interiors. An examination of the plan of the Willow Grove Avenue group will show that several important and highly desirable features have all been achieved at the same time. The rooms are of comfortable dimensions, they are well lighted and the windows are so placed that it is easy to arrange furniture, the plan is convenient and livable, the objectionable service exposure has been minimized almost to the point of elimination without impairing interior efficiency and the whole scheme has been invested with an interest not usual in dwellings of similar size, especially where there are more than two or three of them. In this case each house has a distinct individuality, the treatment in a contiguous mass gives an opportunity rich in possibilities of interesting contour and use of materials and the utmost extent of ground for garden and lawn is achieved. Communication between the quadrangle and the outer side of the mass is gained by arched passageways, a very unobjectionable development of the old-fashioned covered city alley. The sloping grade of Willow Grove Avenue has been followed by descending terraces.

It is matter for regret that more of Mr.

Duhring's plans were not available for publication in this article. From those given, however, it may be seen that they are of decided interest. While Mr. Gilchrist is using brick for the group on Willow Grove Avenue, Mr. Duhring is sticking to the native Chestnut Hill stone for quarry-faced rubble walls. These walls are laid without pointing, so that the fullest possible relief of shadow will mellow their aspect. The general type is that of the gabled Cotswold cottage and the roofs will be of graduated slate instead of stone tiles which, under the circumstances, it would not be practicable to use. All exterior woodwork is of oak, absolutely without finish of any kind, and for the interior work, where any departure is made from white paint which so many tenants seem eager to have, unfinished oak will be used and allowed to take its finish from time and the action of the atmosphere unaided by other agency.

Pastorius Park and its residential development, apart from the intrinsic architectural and civic embellishment interest attaching to such an undertaking, supplies food for thought in many quarters; but especially in the matter of uninspired commercial building, particularly the building of dwellings in suburban "operations," it prompts the query whether the speculative builder and financier may not learn from it a lesson whose fruits will be to their pecuniary advantage and the gratification of public taste.

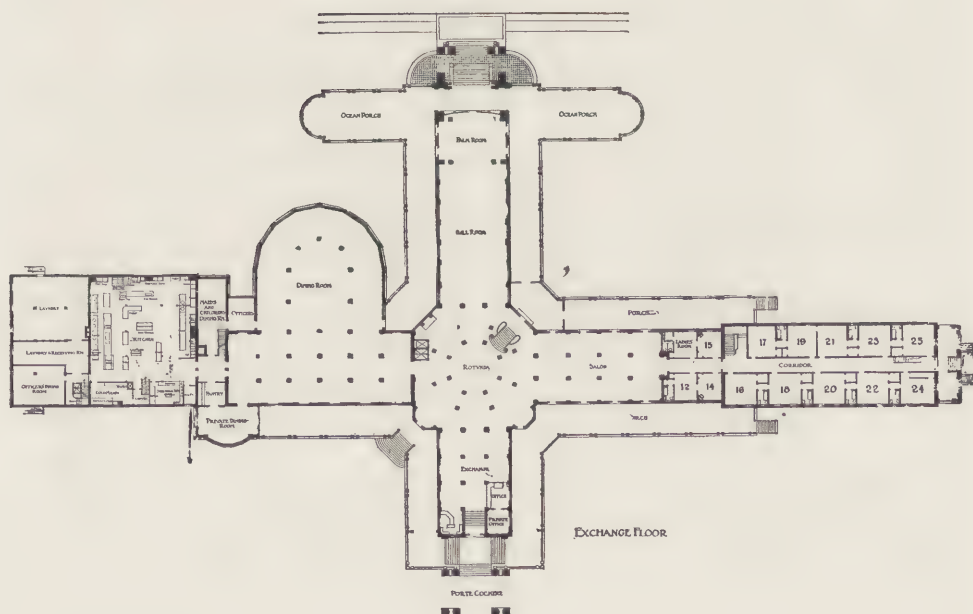
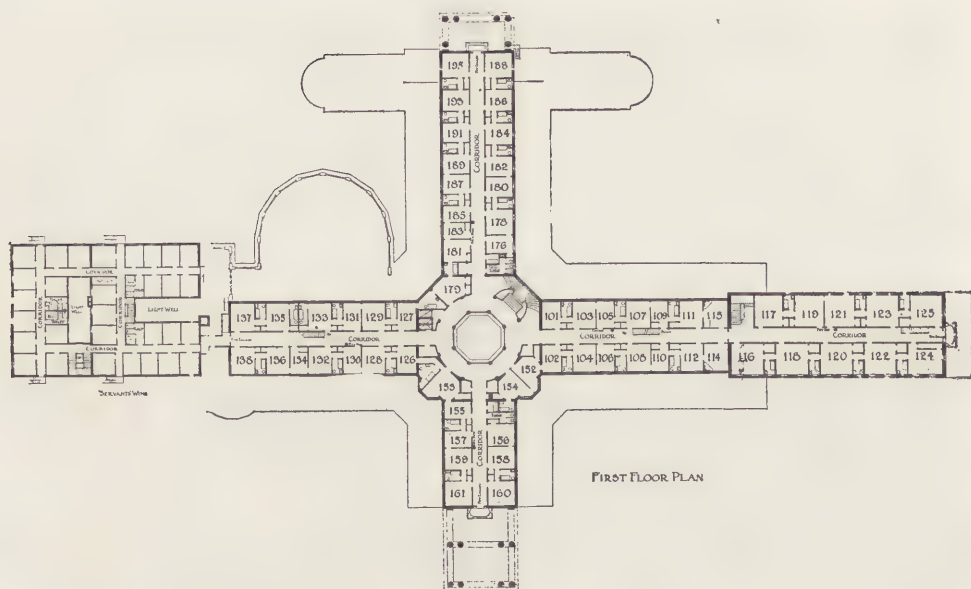


NEW MONMOUTH HOTEL, FROM THE LAKE AND
LOOKING EAST TOWARD OCEAN, SPRING LAKE,
N. J. WATSON & HUCKEL, ARCHITECTS.

PORTFOLIO
OF
CURRENT
ARCHITECTURE



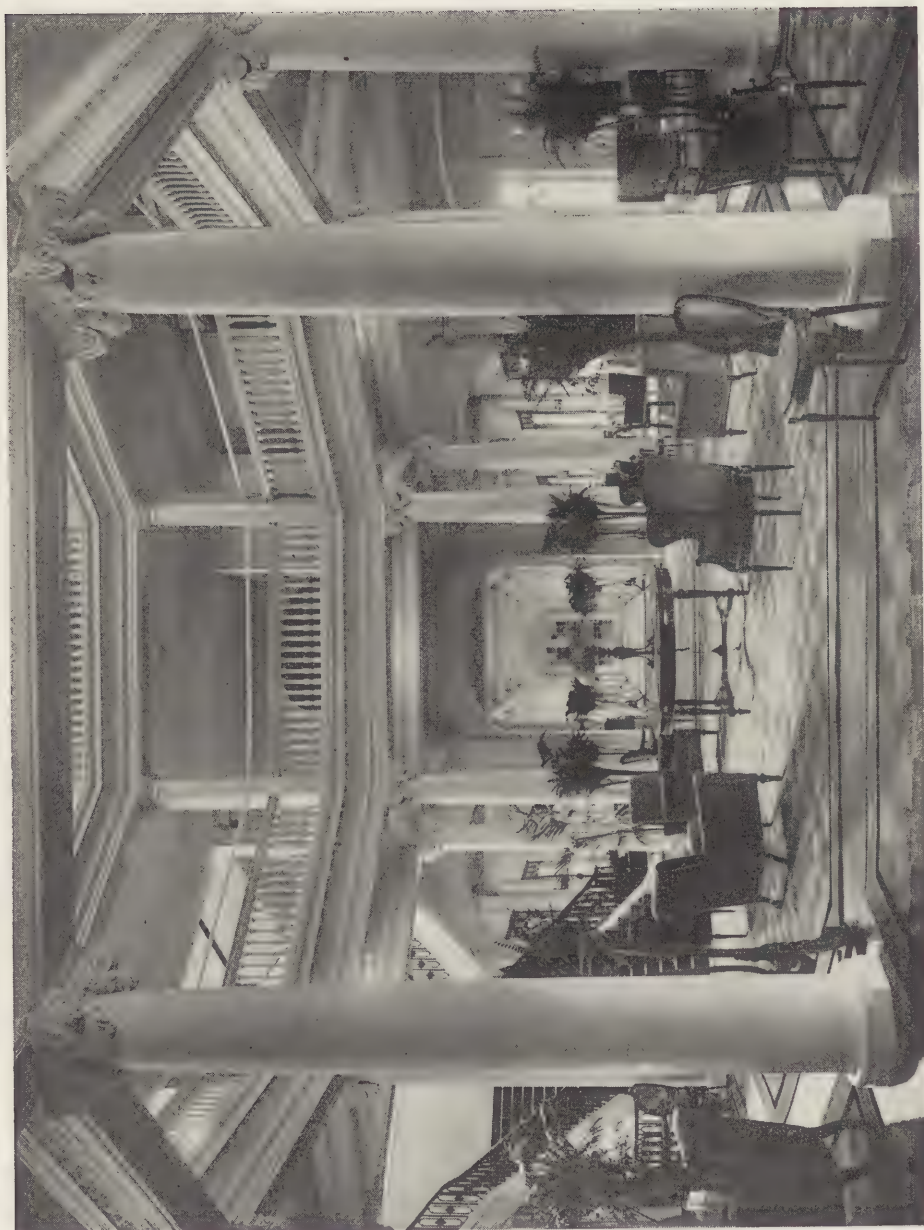
OCEAN ENTRANCE, NEW MONMOUTH HOTEL.



FLOOR PLANS—NEW MONMOUTH
HOTEL, SPRING LAKE, N. J.
WATSON & HUCKEL, ARCHITECTS.



GRAND STAIRCASE IN ROTUNDA, FROM THE
LOUNGE—NEW MONMOUTH HOTEL, SPRING
LAKE, N. J. WATSON & HUCKEL, ARCHITECTS.



THE ROTUNDA, SHOWING VISTA OF THE
SALON—NEW MONMOUTH HOTEL, SPRING
LAKE, N. J. WATSON & HUCKEL, ARCHITECTS.



GRAND SALON, IN LOUIS XVI STYLE—NEW MONMOUTH HOTEL, SPRING LAKE, N. J.
Watson & Huckel, Architects.



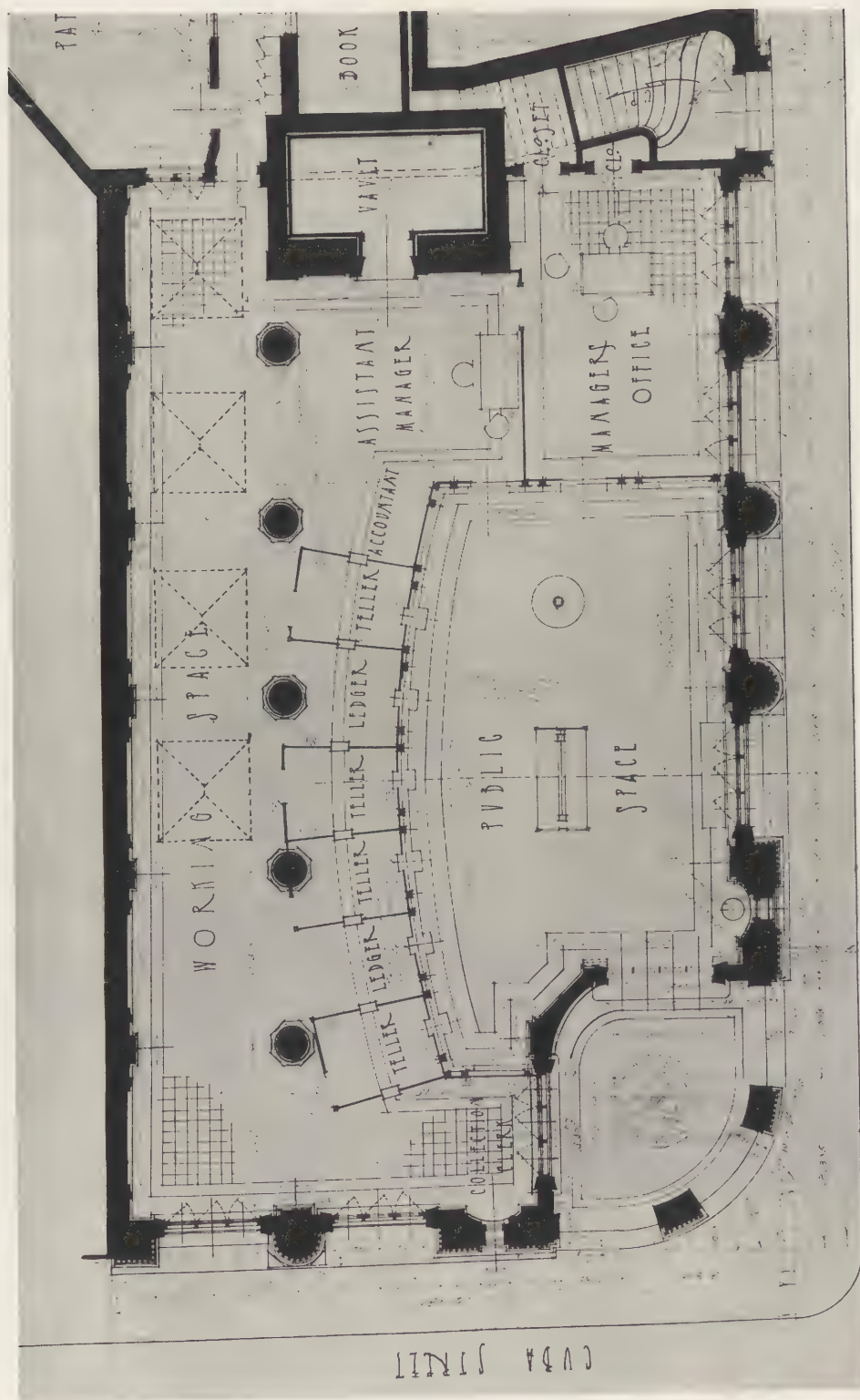
ROTUNDA AND GRAND SALON, FROM OFFICE CORRIDOR—NEW MONMOUTH HOTEL,
SPRING LAKE, N. J.
Watson & Huckel, Architects.



DETAIL—BANK OF NOVA SCOTIA, HAVANA,
CUBA. ARTHUR LOBO, ARCHITECT.
D'OENCH & YOST, ASSOCIATE ARCHITECTS.



BANK OF NOVA SCOTIA, HAVANA, CUBA.
ARTHUR LOBO, ARCHITECT. D'OENCH
& YOST, ASSOCIATE ARCHITECTS



FLOOR PLAN-BANK OF NOVA SCOTIA,
HAVANA, CUBA. ARTHUR LOBO, ARCHITECT.
D'OENCH & YOST, ASSOCIATE ARCHITECTS.



PLAN OF RESIDENCE AND GROUNDS OF GEORGE
B. MONTGOMERY, ESQ., AMHERST ESTATES, BUF-
FALO, N. Y. MANN & COOK, ARCHITECTS.
WILLIAM PITKIN, JR., LANDSCAPE ARCHITECT.



RESIDENCE OF GEORGE B. MONTGOMERY, ESQ., AMHERST ESTATES, BUFFALO, N. Y. MANN & COOK, ARCHITECTS.



HALL—RESIDENCE OF GEORGE B. MONTGOMERY, ESQ.



SUN ROOM—RESIDENCE OF GEORGE B. MONTGOMERY, ESQ.



LIVING ROOM—RESIDENCE OF GEORGE B. MONTGOMERY, ESQ., AMHERST ESTATES,
BUFFALO, N. Y.
Mann & Cook, Architects.



DINING ROOM—RESIDENCE OF GEORGE B. MONTGOMERY, ESQ., AMHERST ESTATES,
BUFFALO, N. Y.
Mann & Cook, Architects.

COLONIAL ARCHITECTURE IN CONNECTICUT



*Text and Measured Drawings by
Wesley Sherwood Bessell*



PART V.

DOOR blinds, as we have already seen, add much to the charm of many Colonial houses. They give color and, when closed in summer, suggest coolness within. There is something of quaintness and homeliness about these simple blinds on a door that is peculiar to them, with their carefully studied detailing, whether they be solid or slatted. In construction the blinds are numerous and varied, but in the majority of cases the stiles and rails are narrow, with a small beadlike moulding as a frame for the slats. The window blinds on the church at Simsbury are not uncommon, yet seldom do we see blinds split as these are; and just this has emphasized the atmosphere we are after. The solid ones were paneled with sunk, raised, or flush panels.

Colonial hardware also is varied and interesting. There are two firms in Boston manufacturing hardware from old models and forms, and true reproductions of the old hardware can be obtained. Unfortunately, most of the hardware on the market is over-elaborate, fussy and lacks character. The old thumb latches, the H hinges, the long wrought iron hinges, and the small oval knobs, the rim locks and knob latches are all found on these old Connecticut houses. The thumb latch was usually set high on the door, giving it a pleasing appearance; the foot scraper, which was carefully designed, the iron railing, with each baluster set into the masonry separately, and the wrought iron lamps were conscientiously studied for effect as part of the exterior.

The clapboards are still another point. Today they are usually spaced all alike, and what a monotony! Not so on the old house; they may be as near to a size as it was possible to get them in some

cases; in others they are just as they came from the rough, varying from a three-inch up to an eight-inch exposure. In some houses where boat nails were used the heads are left exposed, and the paint over them has added greatly to the attractiveness of it all.

The wood quoining, or keyboards at corners, has not been used of late years; if carefully studied and adapted, more of the old atmosphere is procured. This wood quoining is built up separately and fastened to the sheathing, a corner board at first being run flush with the sheathing, and of a fair width. The quoinings vary in size, and should be of a thickness that will stand the weather. How many know that a great deal of the trim is flush with the clapboards on the outside and with the plaster on the inside, that dormers at the jamb are only the thickness of construction, in some cases but five inches, and that in a brick arch there is usually a single line of headers?

All of the above are points of quality seldom found in reproductions, and these, together with other details obtained by close study, are not given the thought they should receive.

The knockers shown in our line drawings are unique in that there are few of this kind in Colonial work, especially the two Essex knockers, which were brought over by Capt. Hayden from England.

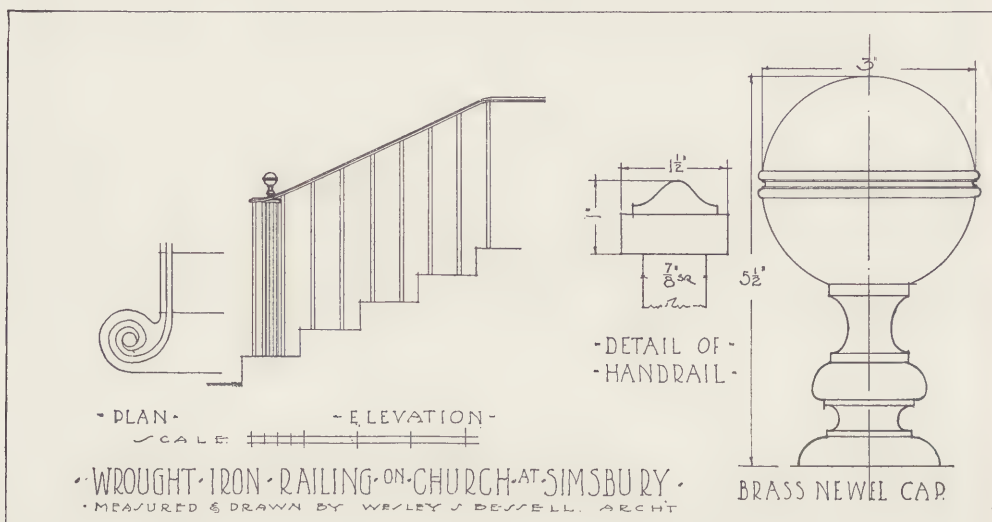
The leaded glass fanlights and side lights shown in the detail drawing give some idea of the old Connecticut practice in the early days. That on the Deming house, which was lately discovered to be pewter, has been for years covered with black paint. Upon the removal of this paint the pewter was found to be tinted in very beautiful colors, the urns in gold, the straight arms in blue, the leaves in a grey white, and the center

piece, the crown of King George III, was in gold and blue. Many of the eagles or setting suns were painted in gold leaf upon the glass itself. Innumerable cornices of elaborate design greet one in certain sections, while other sections have nothing but the plainest of cornices.

Another bit of quaintness still in existence is the sign of the Blackhorse Tavern at Saybrook Point. Certainly there can be nothing more picturesque than these old tavern signs. The black paint on the Blackhorse Tavern sign is very

berland Inn, built in 1767 by a man named Robbins, shows a rather interesting newel post composed of four balusters set under one cap and upon one base. This stair has a high rise and narrow tread, and an open string with paneled jib leads up to a platform from which there is a short run to the second floor.

In the stair of the old house at Essex, the balusters and newels are plain square pieces of wood, the balusters set on an angle with the face of the rib. The rise is nine inches and the tread eight and one-half inches, a very startling condition one



well preserved, and must have been decidedly strong, as the white paint is almost all off. This tavern was on the water edge, and used when travel was principally by water. The sign hung over the doorway, and is an excellent example of Colonial sign boards.

And, last of all, mention must be made of the old bow bay shop windows, of which a fine example may be seen at Litchfield. It is to be hoped that we may witness the return of such artistic little windows as those used by our forefathers which are still unimproved upon.

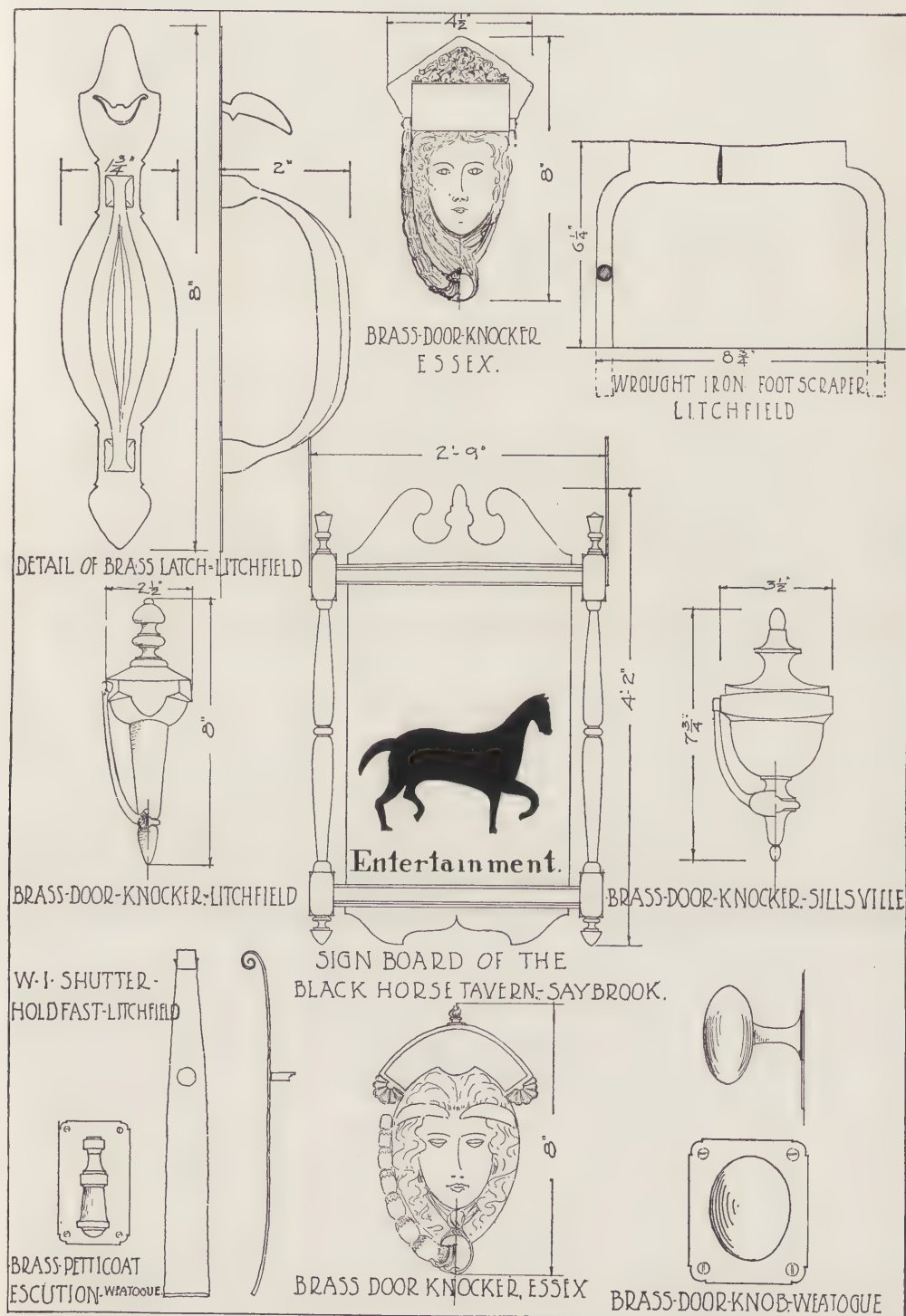
Let us now enter our Colonial home and consider what was done inside to conform to the simplicity of the exterior. As we enter, we naturally turn to the stair and stair hall.

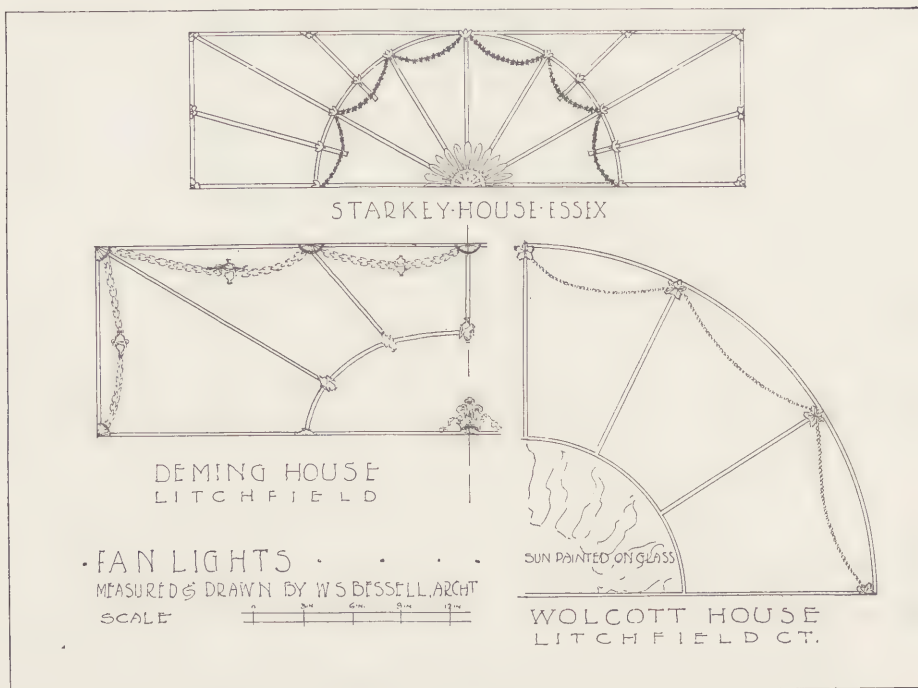
The stairway in the old Duke of Cum-

might say, but in reality the stair is easy to ascend and very quaint and homelike. The saw-cut open string, although in reality hand work, is typical of Colonial stairways, the pattern varying greatly.

The stairway in the Talmadge house, at Litchfield, has a rise of eight and a half inches by a ten-inch tread, a very dignified stair; and the wall side is paneled with a wainscot thirty-one inches in height on a line with the nosing. The balusters on this stair are exactly the same as those of the old Wolcott house in the same town. The saw-cut ends here are of a pattern different from that in the Essex house, and the nosing of the tread is delicate and exceptional; the hand rail is made of mahogany.

The hall containing the stairway is sometimes a mere vestibule with the stair





running across the front, as in the Essex house; sometimes large halls run through the house with stairways running in the same direction, as in the Talmadge house. Then again we have the circular stair and stair hall, as in the Taylor house at New Milford.

After leaving the hall one may enter the parlor or front room; and here usually one's attention is attracted to a well-proportioned mantel and open fireplace. The mantels are delicately moulded as a rule, and sometimes contain very interesting carved bits of ornamentation, such as the mantel in the Butler house at Litchfield. This mantel is one of the best of our Colonial pieces, and worthy of close study. Here the dentils are cylindrical in form, with a coved filler. The column is a one-half column with a very peculiar cap. The whole is painted white and set into the wall, having only a slight projection.

The mantel in the dining room of the Hayden house at Essex is a noteworthy bit of refinement, especially in the mouldings. A great deal of quality is obtained if we follow the old manner of setting these mantels. Instead of the

ugly projection generally given today, the early mantels are set practically flush with the plaster wall, making them appear to be part of the construction. The frieze on the Hayden mantel is curved, which is not an uncommon treatment in Colonial work. The shelf of most mantels is set at a height of about five feet to five feet six inches from the floor level.

The mantel in the Thomas Starkey house and the one in the Pratt homestead are types interesting in both detail and proportion. The Starkey mantel with its channeled pilasters is painted a pumpkin colored brown, and the mantel in the Pratt homestead is white, with an interesting rope moulding and a peculiar channeled member to the base of the pilaster.

A curious old mantel, coarse and heavy, yet which might be adapted and refined, is that in the "Doctor's house" at Essex; all hand work and rather roughly done, it presents a possibility. In good hands, a design similar to this one could be made very pleasing.

Frequently we come upon a room with the fireplace end entirely paneled and

the mantel or fireplace opening worked into it. This is the treatment in the old Hotchkiss house, at Saybrook, the tap room in the Talmadge house, at Litchfield, and the Hayden house, at Essex. These paneled ends are generally painted white, but in some cases they are painted to imitate a grained wood; and if carefully done, the results are very pleasing, especially if the papers on the adjoining walls are well thought out.

The paneled end of the tap room in the Talmadge house is set in the corner, on the angle, and that of the Hayden house is flat but set up to the corner. The curved fireplace head and paneling above in the Hayden house are different from the general run, as is also the pilaster treatment with a base and pedestal cap, unlike any as yet published. The rosette in the cap of the pilaster has a slight sinkage, and the bracket E has a small projection. This room is very interesting in its detail.

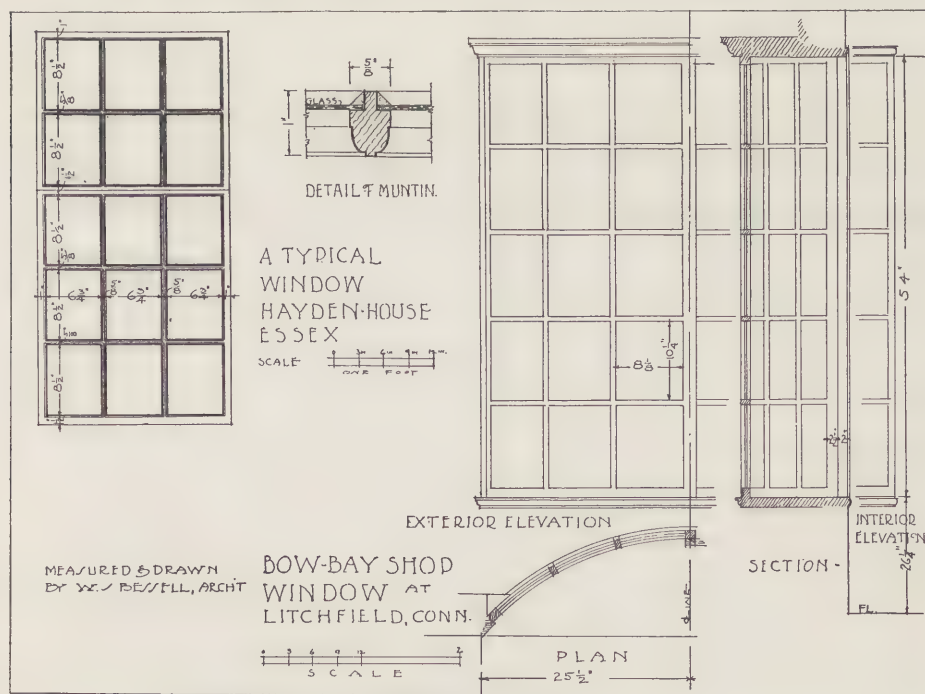
Under this same category are the two rooms in the Duke of Cumberland Inn, at Rocky Hill. The old north room has a panel over its fireplace made of one piece of solid wood, which at one time

contained a painting upon its surface. The closet door in this room with its curved head is of interest, and the parlor room fireplace contains a carved stone lintel which is unusual. Although there are a few others similar to it in the State, this one is exceptionally well done. The china closet is typical, but there are a great many varieties of this type.

A most interesting part of the study of Colonial architecture is that pertaining to the wonderful old kitchen fireplaces and mantels. Their plainness give them a charm far above anything else in the house; huge single stones for a hearth and three large single stones constitute the facing; around this are placed the mantels of large plain surfaces capped by a well moulded shelf such as the one in the Capt. Asubel Arnold house, Essex, and the Butler house, Litchfield.

As I have said before, the trim in general is placed flush with the plaster; and this holds true in regard to the baseboard, wood cornices, window stool, etc.

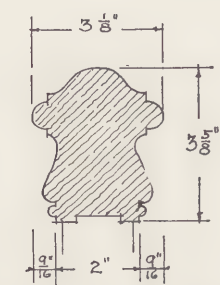
An interesting group of doors are those in the old kitchen of the Butler house, the center door opening onto the



DETAILS OF STAIR NOSING
BALUSTERS & HANDRAIL.
IN THE TALMADGE HOUSE.
LITCHFIELD, CONN.

SCALE 

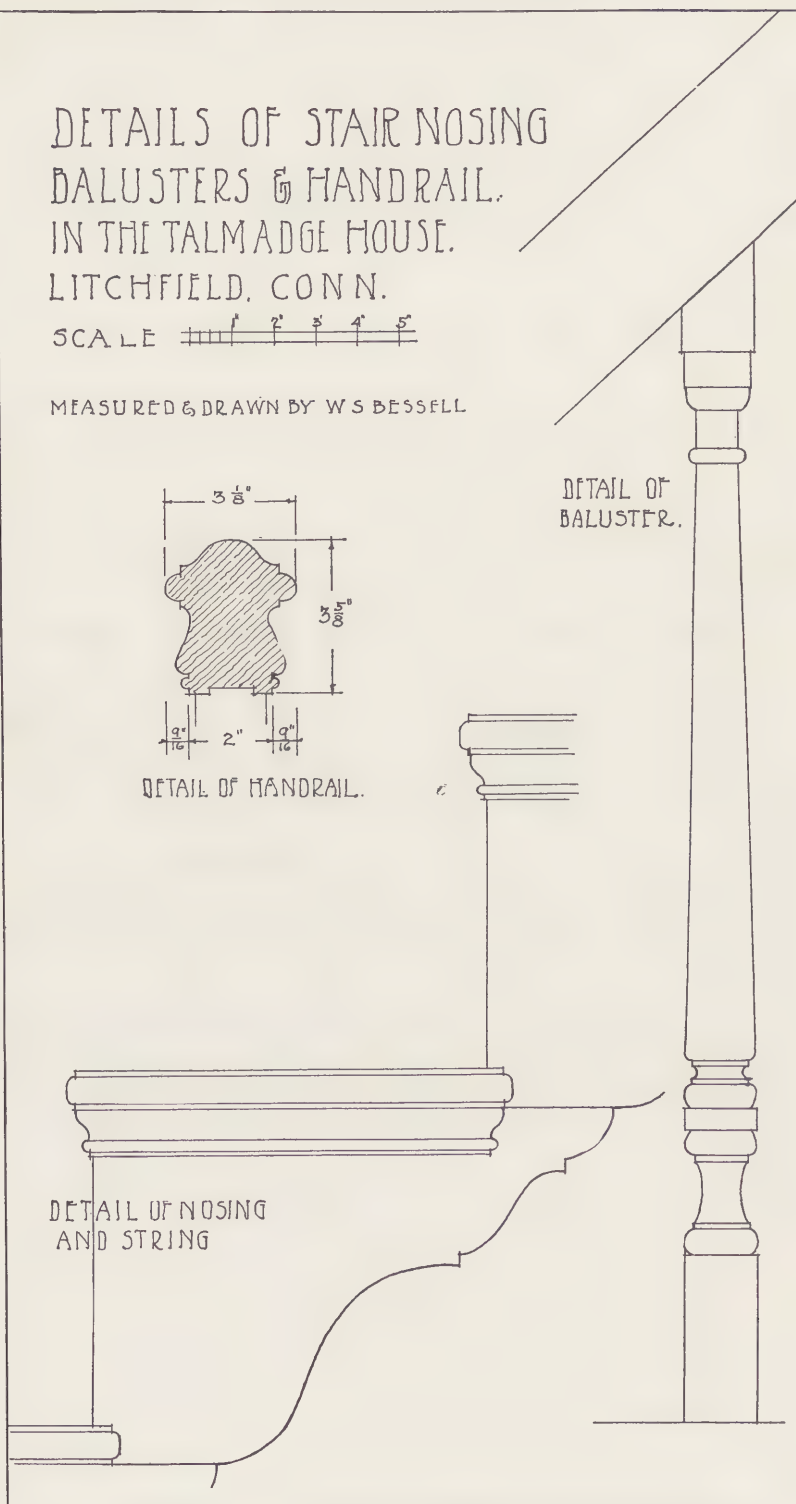
MEASURED & DRAWN BY W S BESELL

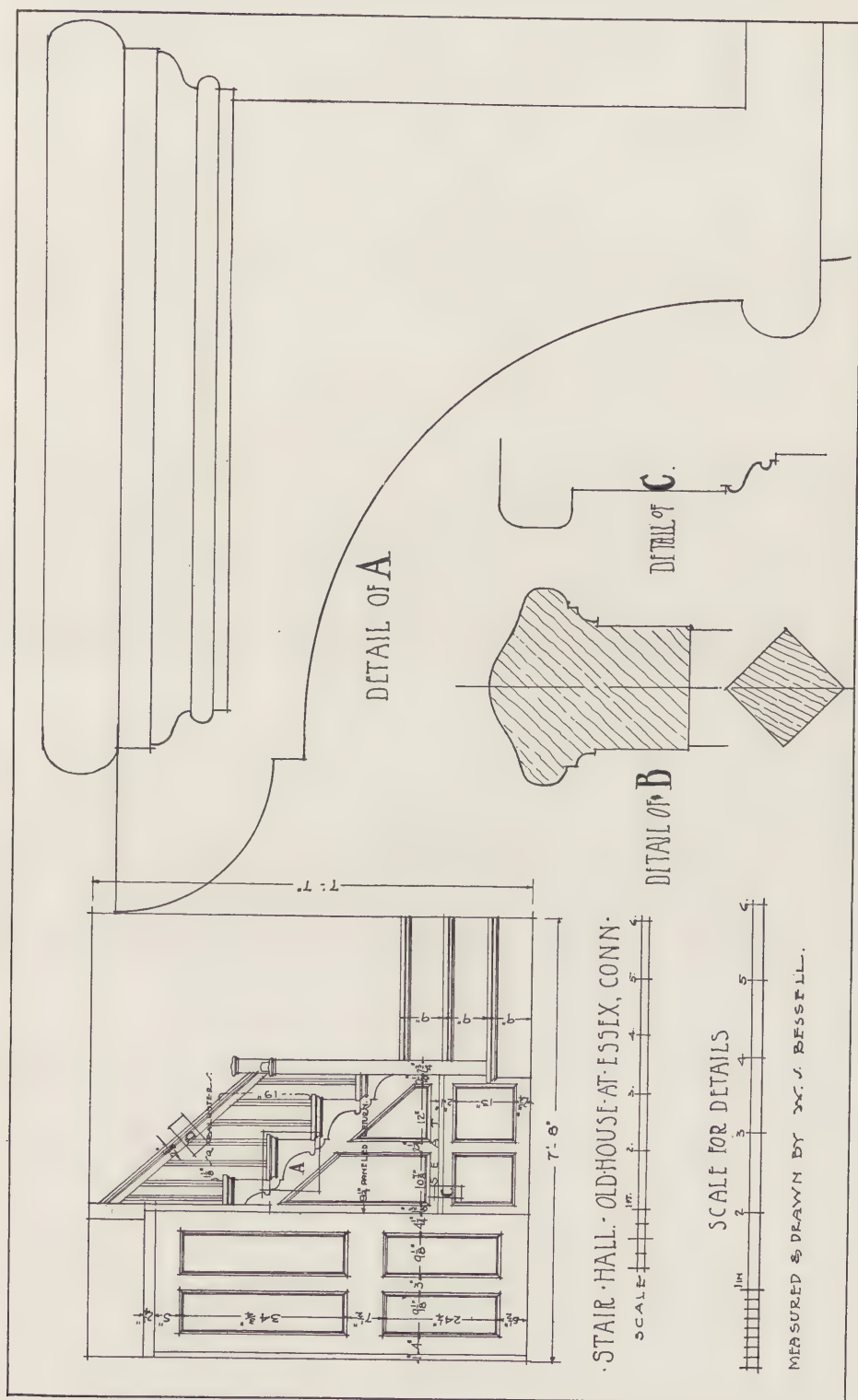


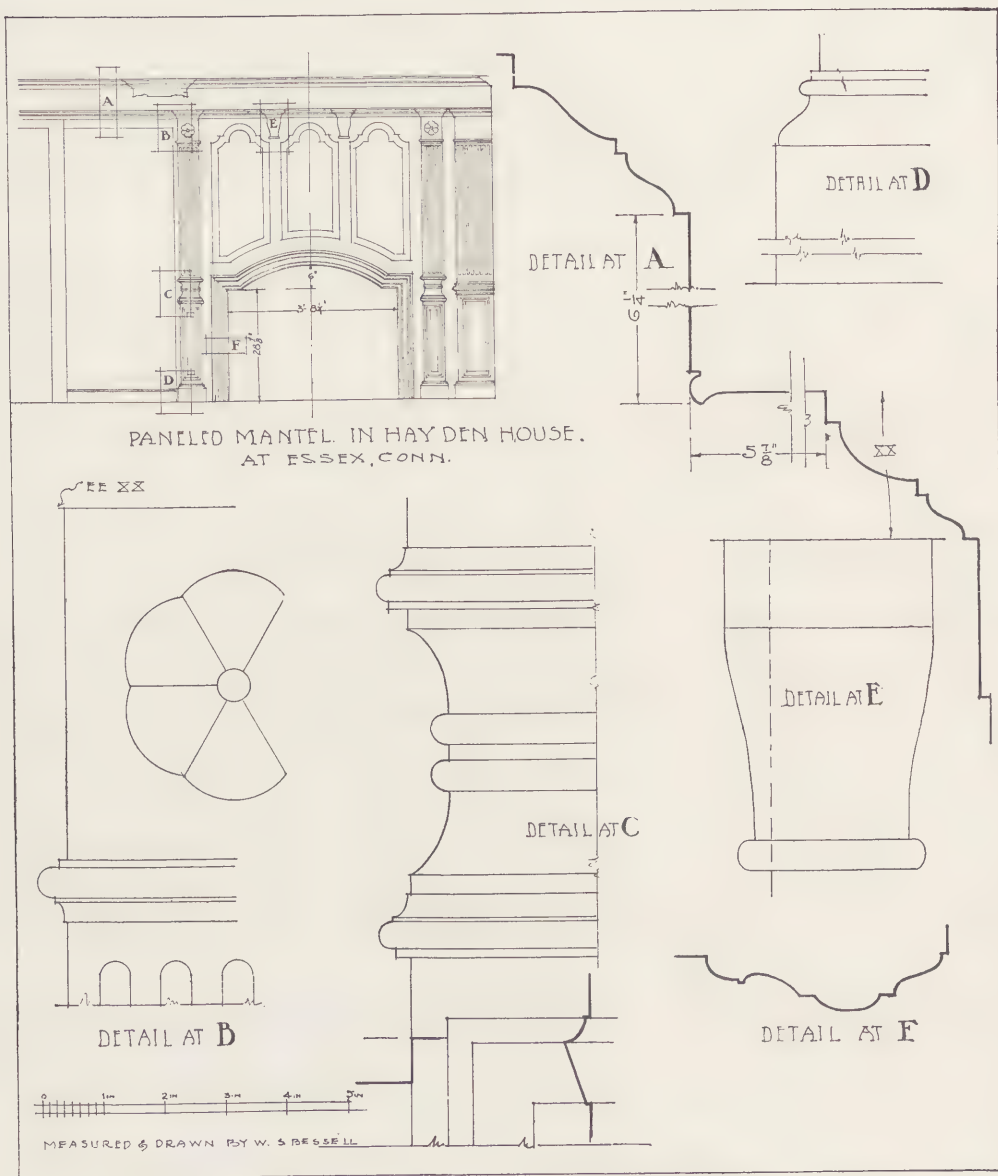
DETAIL OF HANDRAIL.

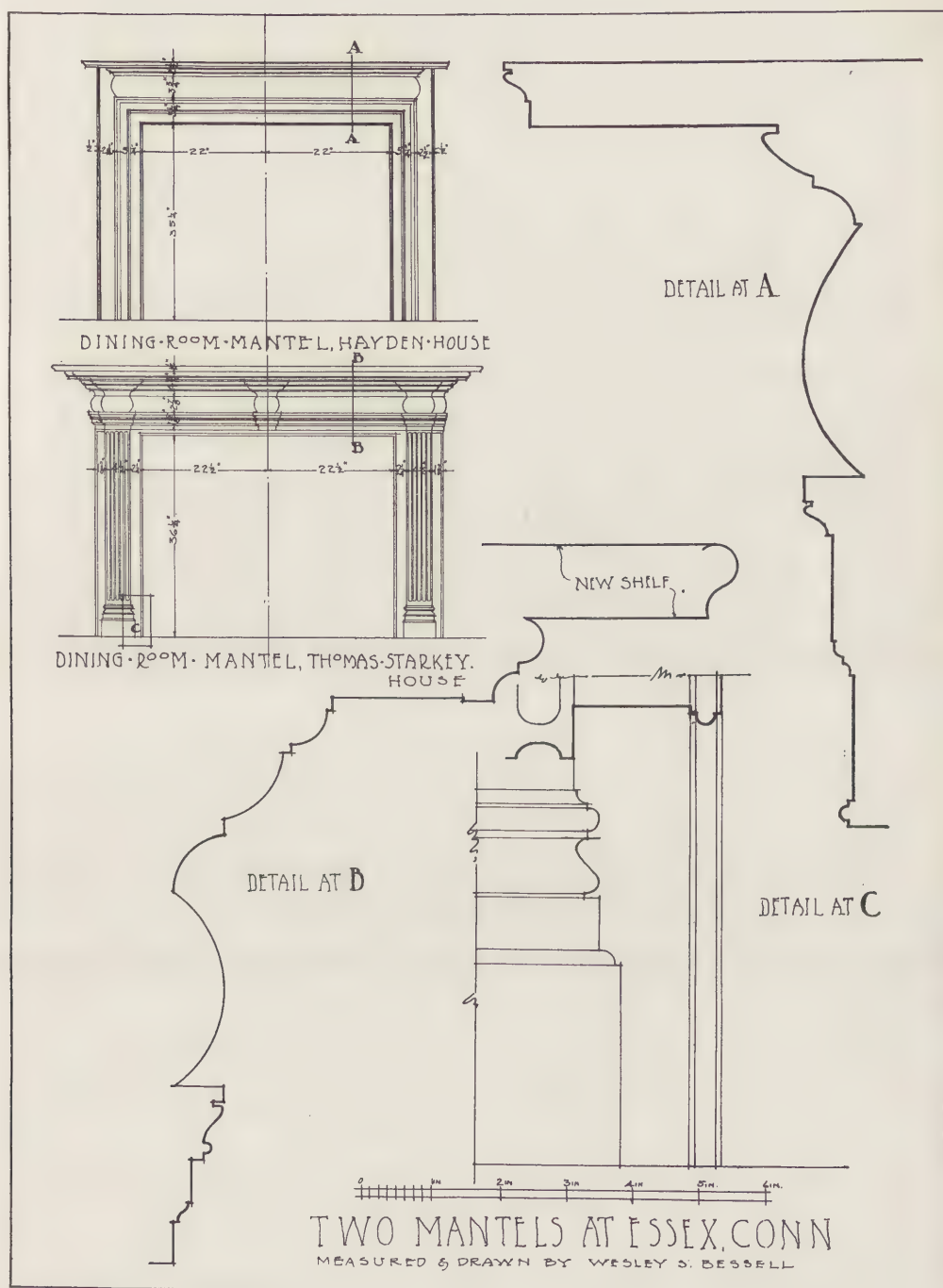
DETAIL OF
BALUSTER.

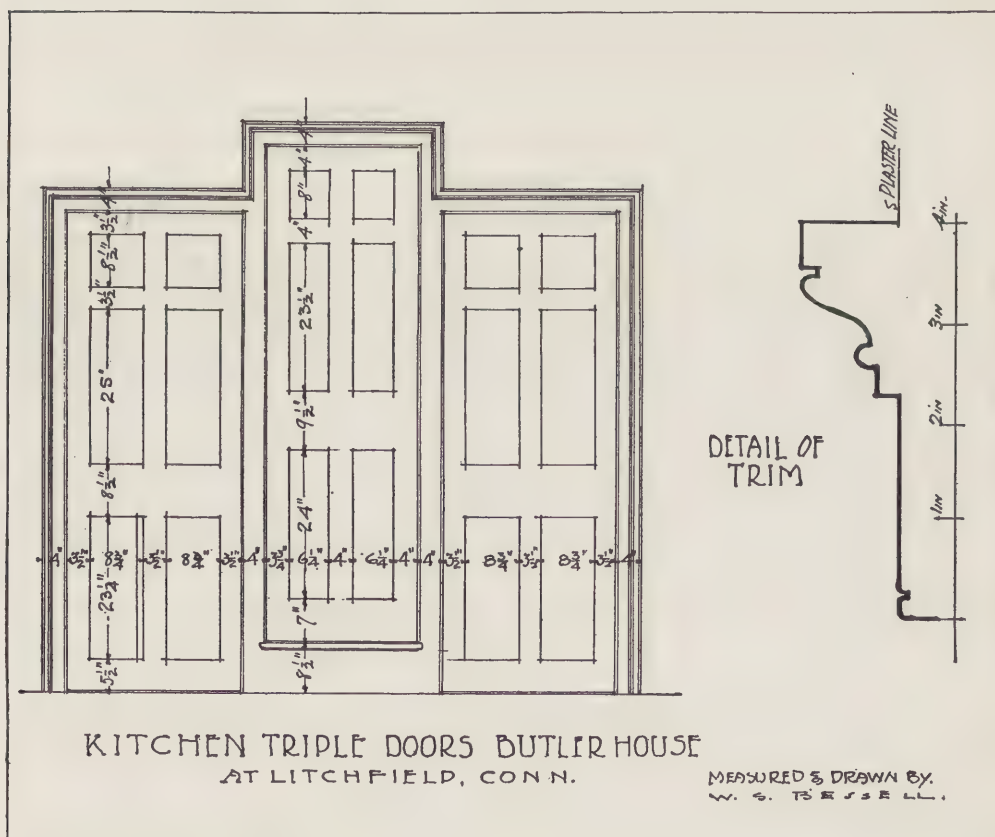
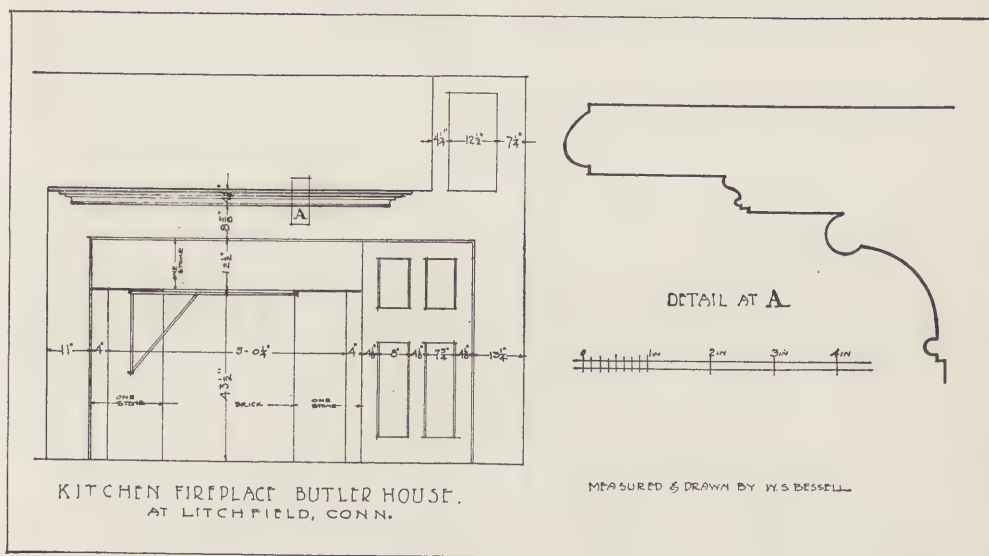
DETAIL OF NOSING
AND STRING









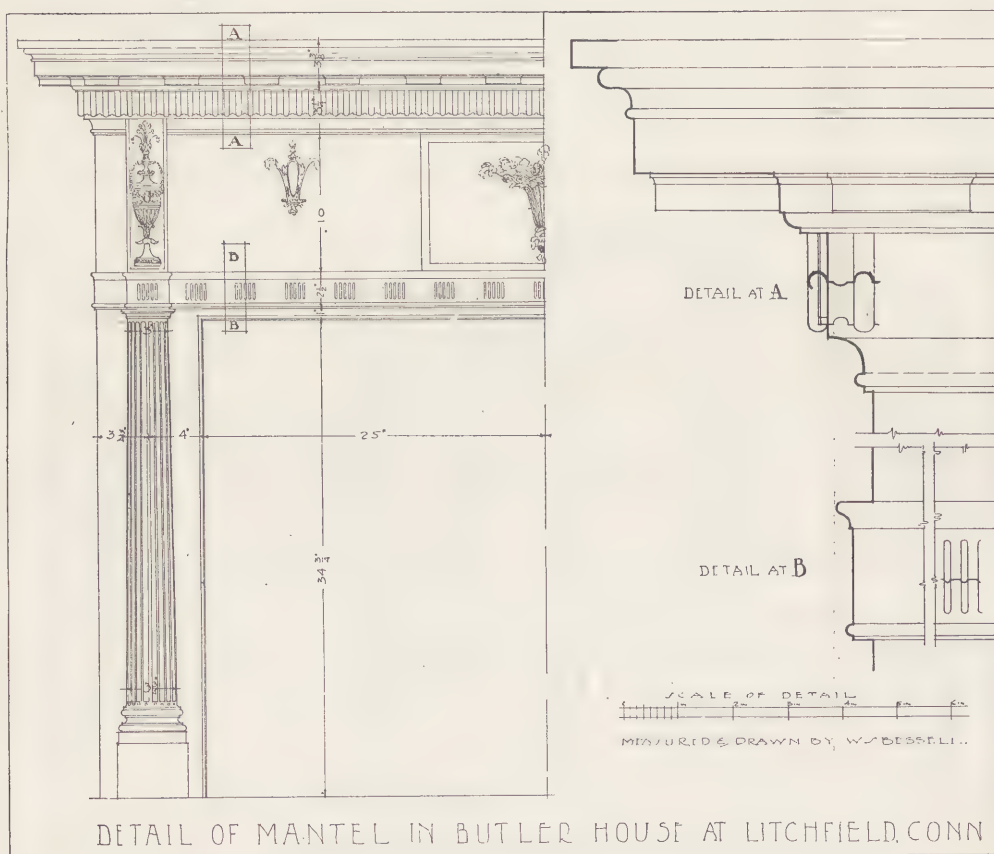


rear stairway; here the trim is shown as it was generally put up, flush with the plaster.

The interiors of our old houses show a simplicity of good taste corresponding to a plain, straightforward exterior. Thought along the same lines should be given to the furnishing of such a room; the vast majority of interiors today are improperly furnished, and greatly overfurnished; there is no chance given the wall surface to play its most important part. A mad jumble of furniture, unsymmetrical one piece with the other, and none of it in harmony with the room itself, make our interiors a sorry mess.

What an opportunity has been lost to

America! One can but dream of the evolution which our architecture might have followed. Think of Colonial America, with its endless possibilities developed along Colonial and Georgian lines. Towns all harmonizing one with the other, yet each an individual and interesting unit. New England with her English interpretation, New Jersey and Pennsylvania with the Dutch influences, Maryland and the South with their own dignified adaptation. Instead we have the Victorian, Queen Elizabeth and carpenter architecture, followed by the present day mad scramble of every architect and client trying to outdo his neighbor, each in a different type, with the great majority poorly interpreted.



The AMERICAN HOSPITAL DEVELOPMENT

By EDWARD F. STEVENS

PART II.

THE Bridgeport Hospital is one of those referred to where modern additions have been made to existing buildings in an effort to make a well-balanced and complete institution.

The maternity and children's pavilion, finished during the present season, has some features rather unique for an American hospital. The ward unit adopted in the public ward is one which the writer found very successfully used in the Rigs Hospital (Fig. 31) at Copenhagen. This ward unit in the Bridgeport Hospital (Fig. 32) differs from the ordinary sixteen-bed ward of the majority of hospitals in this respect—instead of the beds being arranged in two rows of eight each, they are arranged in four groups of four each, with permanent screens between the groups (Fig. 36). Upon these screens are placed the nurses' call system, the bedside lights, and any other necessary permanent fixtures. In the children's ward, the screens are made of plate glass (Fig. 37), affording absolute supervision of the ward.

The day-room, or play-room, is introduced into this hospital as a necessary adjunct to the children's ward.

The isolation department is so arranged that it can be used for either children's or maternity cases.

On the second floor of the maternity pavilion (Fig. 33) are situated the delivery rooms, sterilizing room, doctors' waiting room, etc., the major part of the floor being devoted to private rooms.

The third floor (Fig. 34) is devoted entirely to an outdoor or roof ward. Provision, however, is made in the equipment for the care of patients here throughout the twenty-four hours by

having a serving kitchen, toilet room, and isolation room.

The operating suite (Fig. 42), also a new addition, is planned and equipped with reference to best light, ventilation, and hygienic conditions.

In planning the St. Luke's Hospital, the prevailing idea of some of the best European hospitals was brought into play—that is, the use of the low, isolated pavilions, grouping these around the service buildings.

While this institution is only partially complete, the general block plan (Fig. 43) will indicate the general scheme in the architect's mind. These buildings are connected by open-air corridors. The service for food and for the transportation of patients from building to building passes through these open-air corridors or across the grounds.

The isolation pavilions are, perhaps, the most interesting features of the group, there being one building for white patients (Fig. 48) and one for colored. The plan is an adaptation of that of the Pasteur Institute of Paris, and avoids all the cumbersome and elaborate arrangements of the old school. All classes of contagious cases (with the exception of smallpox) are treated in one building, all acute cases being in single rooms and the convalescents in small wards. The rooms are cubicals, with glass partitions for ease of observation, each cubical being complete in itself. Each case is treated as a separate entity. The success of the plan depends largely upon the correct technique, the so-called "aseptic nursing."

The problem of providing a small hospital in the small municipality is quite as

complex as and sometimes more difficult than that of providing the larger institution; for the thirty to fifty-bed hospital must be planned with provision for the care of the same cases that the two-hundred to five-hundred-bed hospital must have.

Still it is impossible, except in rare cases, to provide for the more complex departments where research work can be done. The smaller municipality then must be content with equipment sufficient to do major surgical operations and to provide for the simpler methods of medical treatment and dietetics, and must rely on the larger institutions for help. In addition to performing the major operations it must be prepared for maternity work and the care and segregation of children and still keep the cost within the modest appropriation at the control of the hospital committee.

The thirty-bed hospital at Barre (Vt.) (Figs. 50 to 54) fills the needs of such a small municipality. On the first floor provision is made for the administration, laboratory, and X-ray work, the heating, cooking and storage, while the two upper floors are devoted entirely to patients.

The contour of the Vermont hills lends itself to the economic planning of this institution.

Complete departments for the surgical and maternity work are provided, segregated from the rest of the hospital. An effort has been made, even in this small hospital, to minimize the noises that arise in any institution of this kind.

The roof ward (Fig. 53) is made complete, similar to that mentioned in the description of the Bridgeport maternity pavilion.

The popularity of the private hospital is extending so in Canada, as well as in this country, that many of the larger institutions are setting apart buildings for the care of the wealthy sick, fitted up with all the luxuries of the best-kept private homes. The demand for such a building in Canada's great hospital, the Royal Victoria of Montreal, has been so great that one of her most generous-hearted sons has provided the means for building a complete and thoroughly-

equipped private-patient pavilion for this institution.

The general plan (Fig. 55) shows the location in connection with the existing hospital. Again it has been necessary to plan with precipitous grades, and the approach to this pavilion from the main hospital is over a bridge from the second story of the present building; thence through the tunnel into the mountain; thence, by means of elevators and staircases, to the various floors of the new pavilion.

While every institution should have its entrance speak "Welcome" to the coming guest, it is doubly important in a building of this kind that much care be devoted to making an entrance commensurate with the object for which the building is erected. The severe hygienic detail which it is desirable to use where surgery and surgical dressings are going on can be abandoned here and the esthetic side considered. While the question of hygiene should never be lost sight of in any hospital department, the hospital architect should not be a slave to this fancy, but should be able to couple good hygiene with good design.

The medical department of this building will be as complete as that of any building of its kind in America, for it is realized by the authorities of this hospital that it is time that the medical man should have greater opportunities for his work than are provided in the majority of medical institutions.

The surgical department will be most complete. The system of lighting will be entirely indirect, no lighting fixture being in the operating-room, but all concealed behind the glazed ceiling.

Entirely new models of sterilizers are being designed for this building. Distilled water for drinking purposes will be provided on all floors.

A series of balconies from private rooms is arranged on all sides of the building, making it possible for the private patients to have their own private balconies, just as they have their own baths and toilets. Additional airing balconies for every floor are provided.

Much of the equipment will be especially designed for this building.



FIG. 29. OPERATING ROOM—OHIO VALLEY GENERAL HOSPITAL, WHEELING, W. VA.
Edward F. Stevens, Architect.



FIG. 30. ISOLATION DEPARTMENT CORRIDOR—OHIO VALLEY GENERAL HOSPITAL,
WHEELING, W. VA.

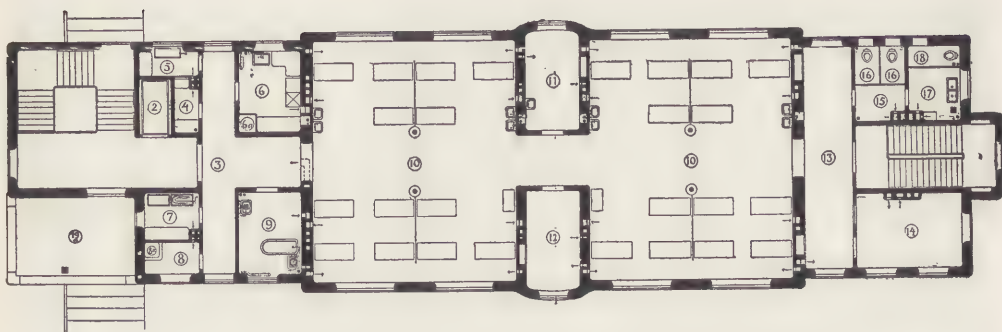
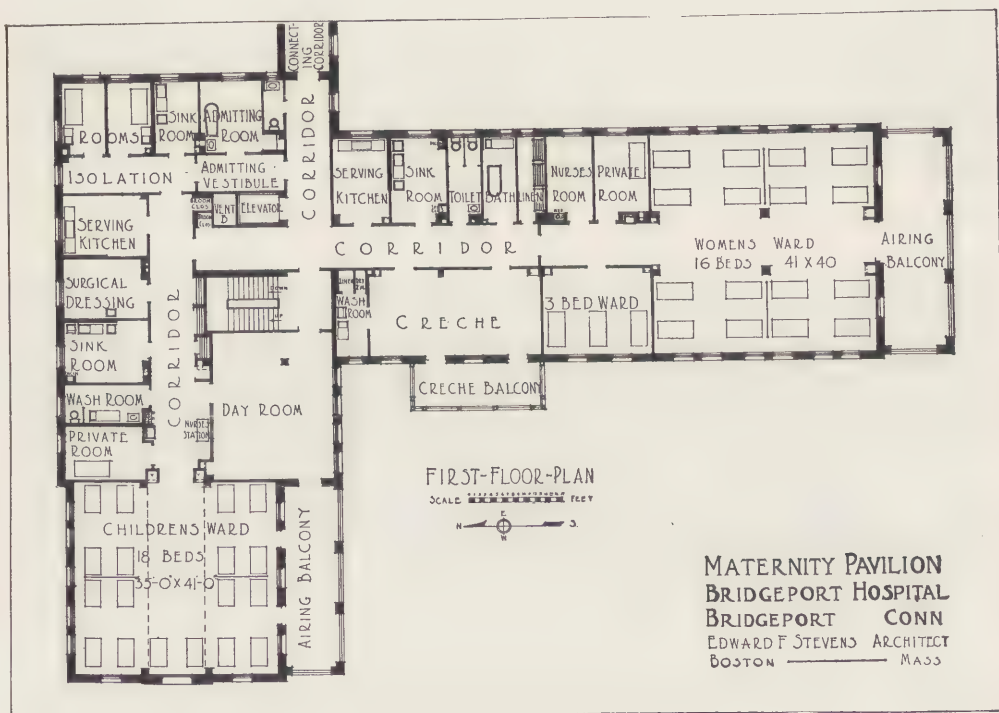


FIG. 31. PLAN OF WARD UNIT—RIGS HOSPITAL, COPENHAGEN, DENMARK.

FIG. 32. PLAN OF FIRST FLOOR—MATERNITY BUILDING, BRIDGEPORT (CONN.) HOSPITAL.
Edward F. Stevens, Architect.

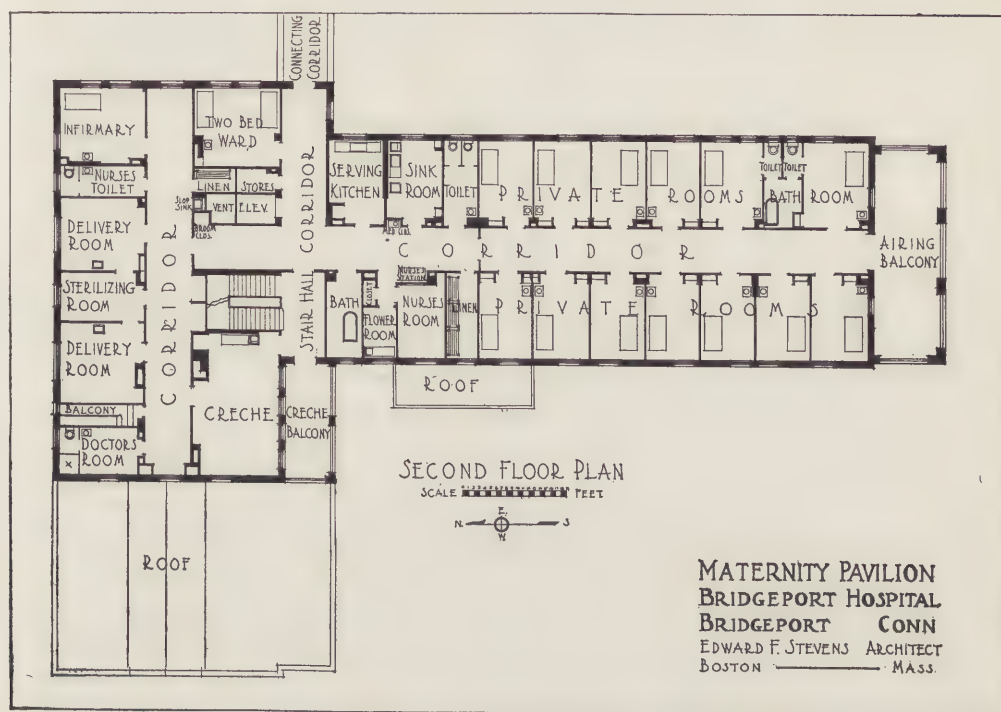


FIG. 33. PLAN OF SECOND FLOOR—MATERNITY BUILDING, BRIDGEPORT (CONN.) HOSPITAL.
Edward F. Stevens, Architect.

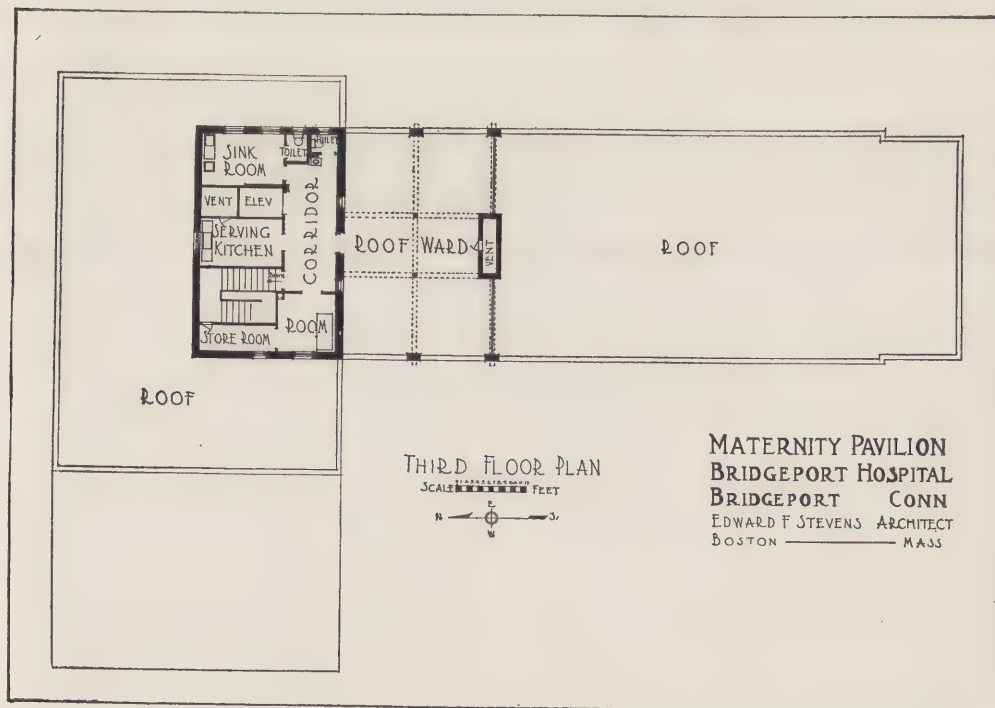


FIG. 34. ROOF WARD—MATERNITY BUILDING, BRIDGEPORT (CONN.) HOSPITAL.
Edward F. Stevens, Architect.



FIG. 35. EXTERIOR OF MATERNITY BUILDING, BRIDGEPORT (CONN.) HOSPITAL. EDWARD F. STEVENS, ARCHITECT.



FIG. 36. MATERNITY WARD—BRIDGEPORT (CONN.) HOSPITAL.
Edward F. Stevens, Architect.



FIG. 37. CHILDREN'S WARD—MATERNITY BUILDING, BRIDGEPORT (CONN.) HOSPITAL.
Edward F. Stevens, Architect.

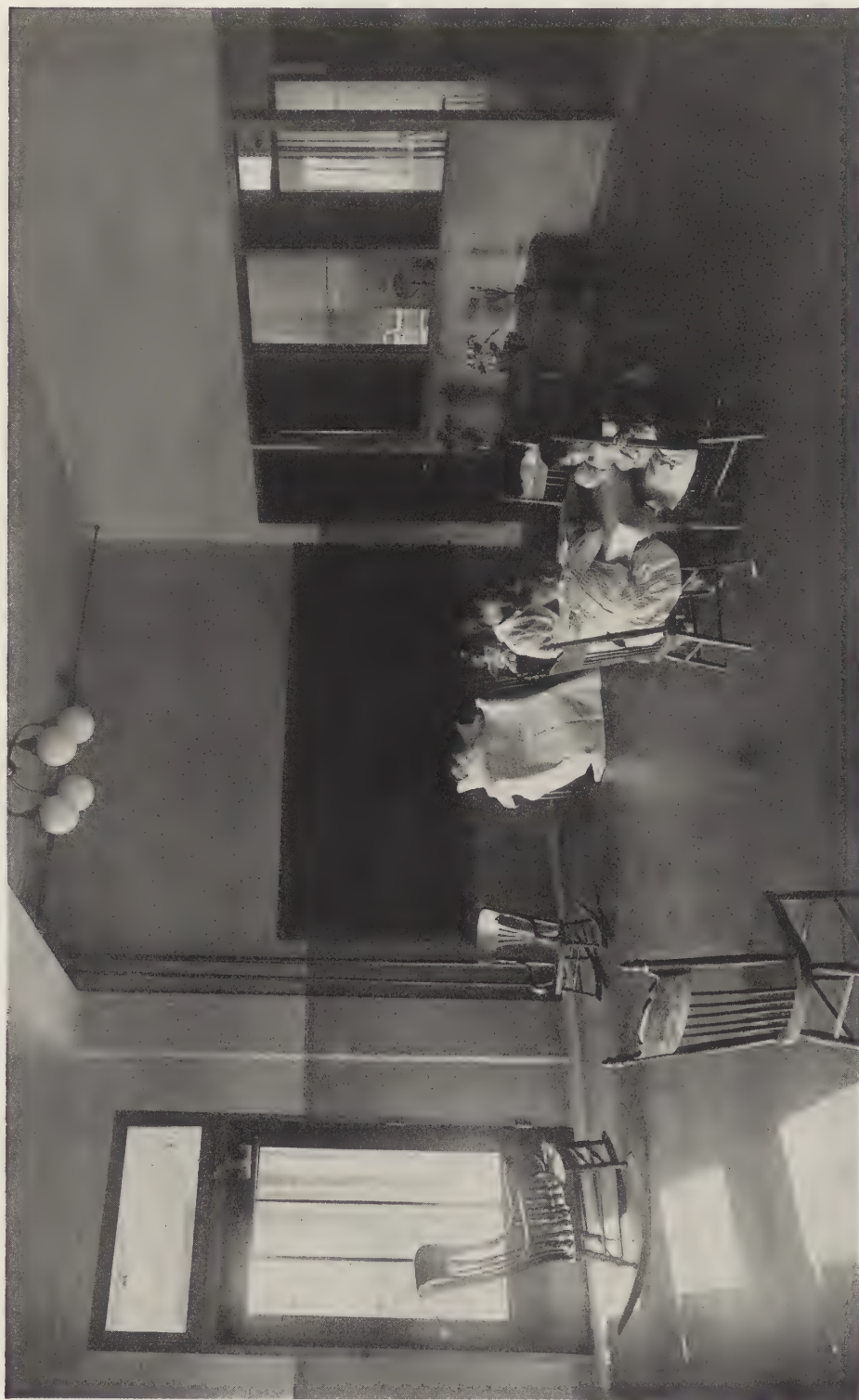


FIG. 38. DAY ROOM IN CHILDREN'S WARD—BRIDGEPORT (CONN.) HOSPITAL. EDWARD F. STEVENS, ARCHITECT.



FIG. 39. MATERNITY OPERATING ROOM—BRIDGEPORT (CONN.) HOSPITAL.
Edward F. Stevens, Architect.



FIG. 40. PRIVATE ROOM—MATERNITY BUILDING, BRIDGEPORT (CONN.) HOSPITAL.
Edward F. Stevens, Architect.



FIG. 41. CRECHE-MATERNITY BUILDING, BRIDGEPORT
(CONN.) HOSPITAL. EDWARD F. STEVENS, ARCHITECT.



FIG. 42. MAJOR OPERATING ROOM—BRIDGEPORT (CONN.) HOSPITAL.
Edward F. Stevens, Architect.

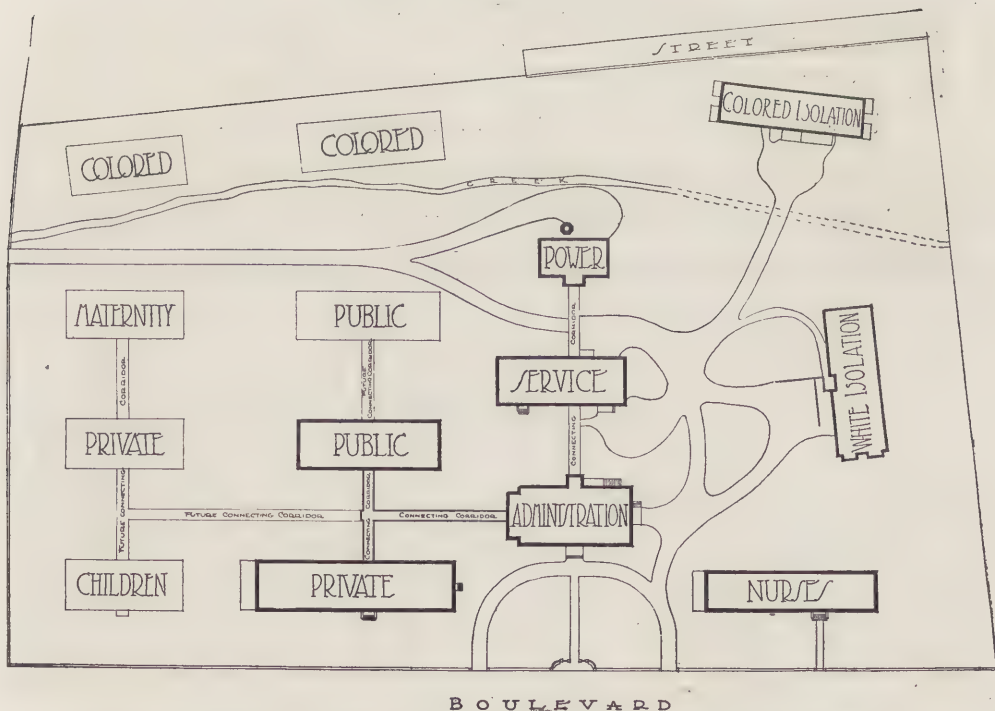


FIG. 43. GENERAL GROUP PLAN—ST. LUKE'S HOSPITAL, JACKSONVILLE, FLA.
Edward F. Stevens, Architect; Mellen C. Greeley, Associate Architect.

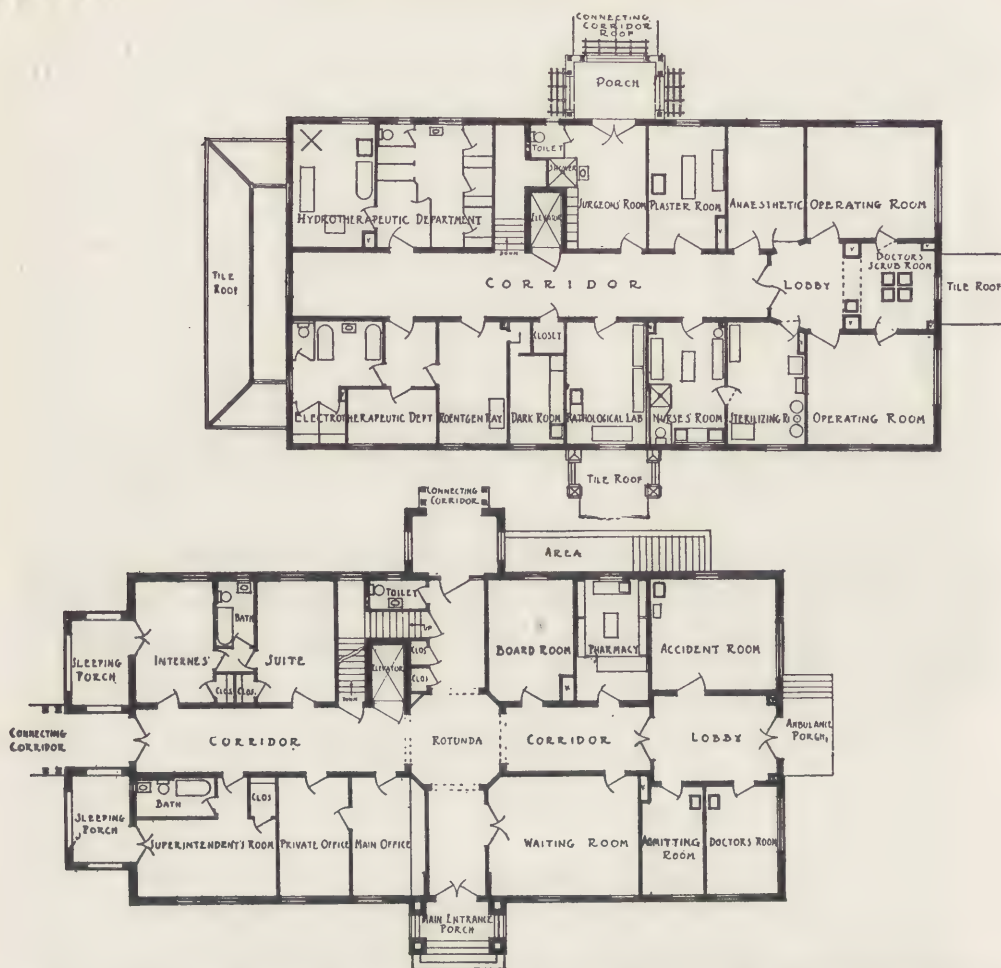


FIG. 44. FIRST AND SECOND FLOORS—ADMINISTRATION BUILDING, ST. LUKE'S HOSPITAL.



FIG. 45. VIEW OF ADMINISTRATION BUILDING, ST. LUKE'S HOSPITAL, JACKSONVILLE, FLA.
Edward F. Stevens, Architect; Mellen C. Greeley, Associate Architect.

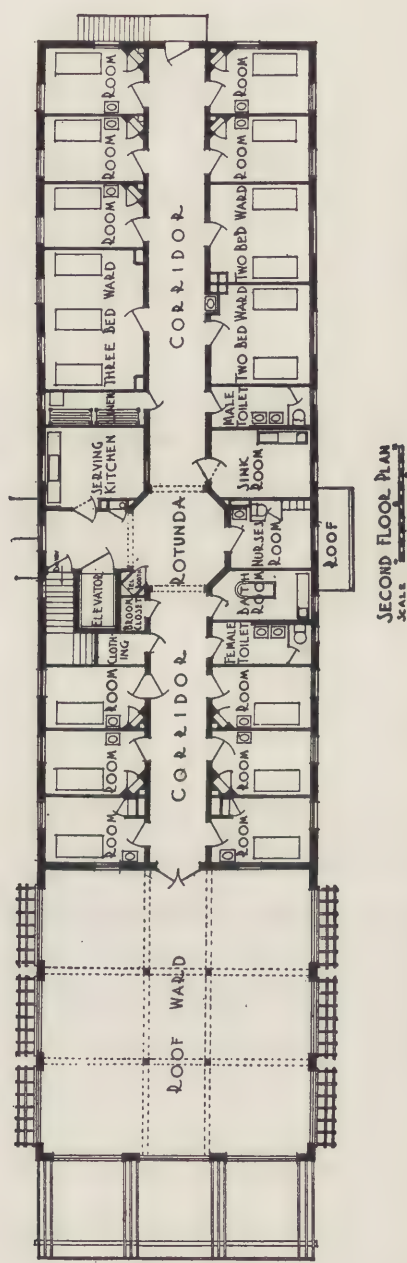
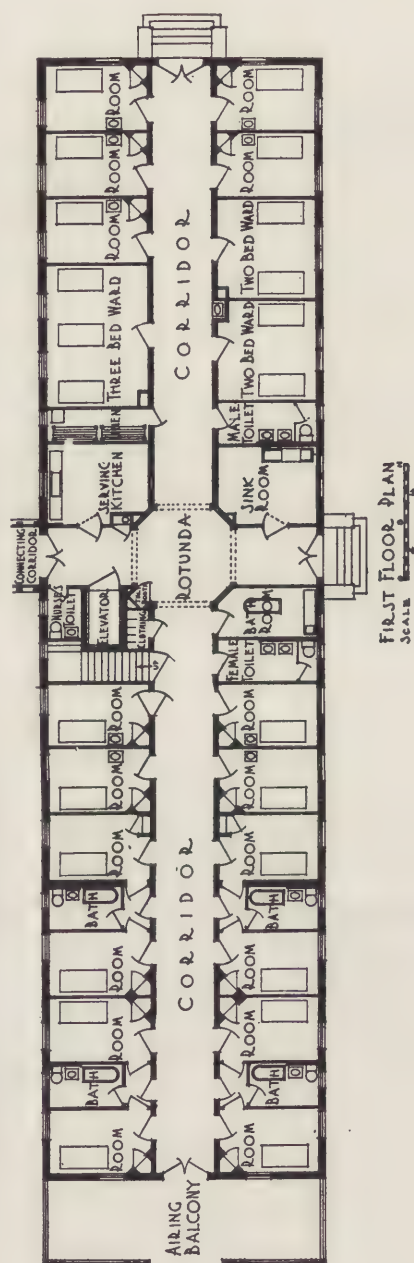


FIG. 46. FIRST AND SECOND STORIES—PRIVATE WARD BUILDING, ST. LUKE'S HOSPITAL, JACKSONVILLE, FLA. EDWARD F. STEVENS, ARCHITECT; MELLEN C. GREELEY, ASSOCIATE ARCHITECT.



FIG. 47. VIEW OF PRIVATE WARD BUILDING—ST. LUKE'S HOSPITAL, JACKSONVILLE, FLA.
Edward F. Stevens, Architect; Mellen C. Greeley, Associate Architect.



FIG. 48. VIEW OF WHITE ISOLATION BUILDING, ST. LUKE'S HOSPITAL, JACKSONVILLE, FLA.
Edward F. Stevens, Architect; Mellen C. Greeley, Associate Architect.

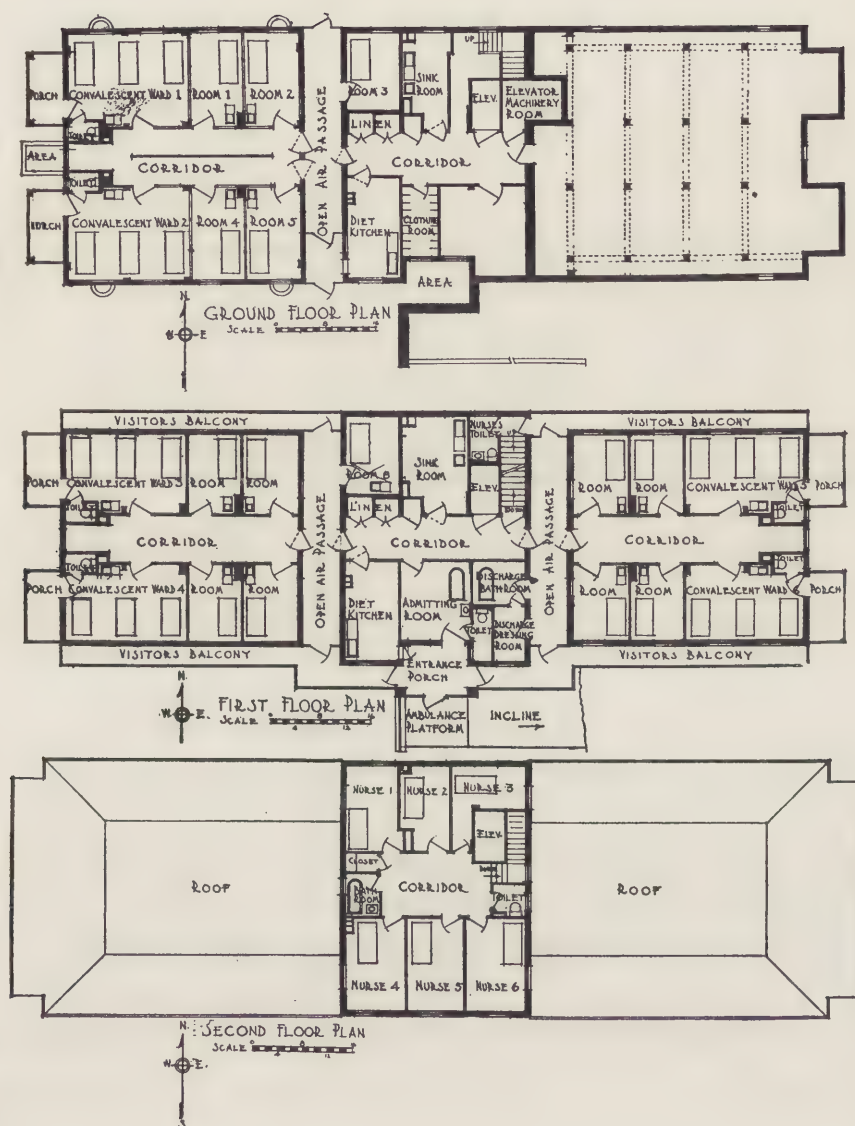
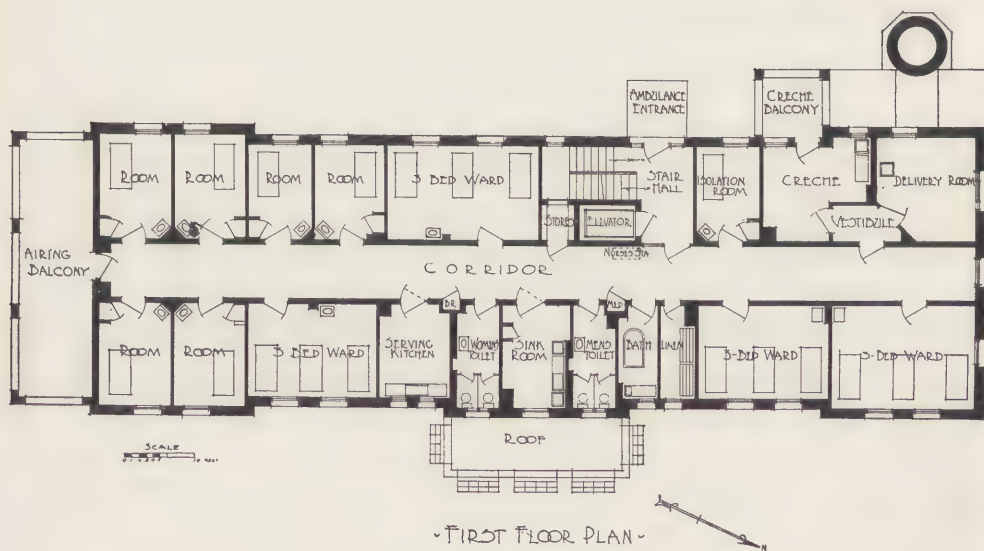
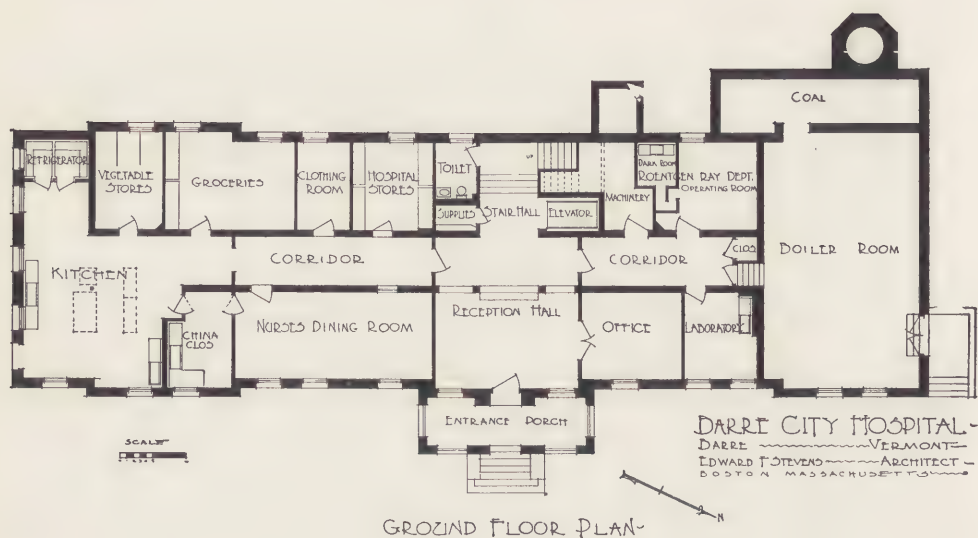
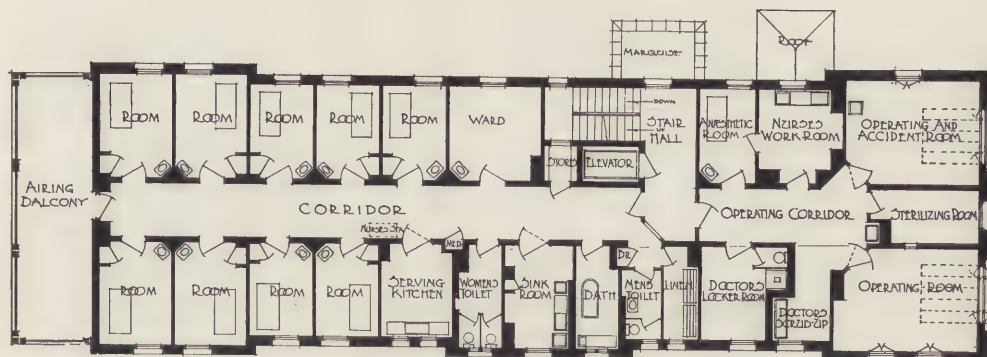


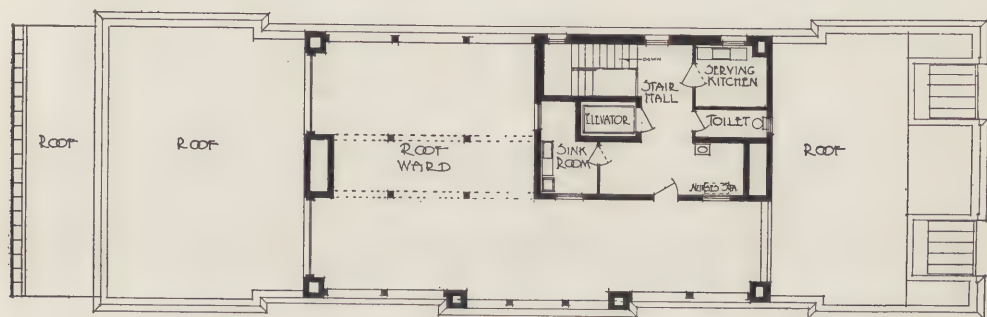
FIG. 49. FLOOR PLANS—WHITE ISOLATION BUILDING, ST. LUKE'S HOSPITAL, JACKSONVILLE, FLA. EDWARD F. STEVENS, ARCHITECT; MELLEN C. GREELEY, ASSOCIATE ARCHITECT.



FIGS. 50 AND 51. FLOOR PLANS—BARRE (VERMONT)
CITY HOSPITAL. EDWARD F. STEVENS, ARCHITECT.



SECOND FLOOR PLAN



THIRD FLOOR PLAN -



FIGS. 52, 53 AND 54, FLOOR PLANS AND VIEW OF EXTERIOR—BARRE (VERMONT) CITY HOSPITAL. EDWARD F. STEVENS, ARCHITECT.

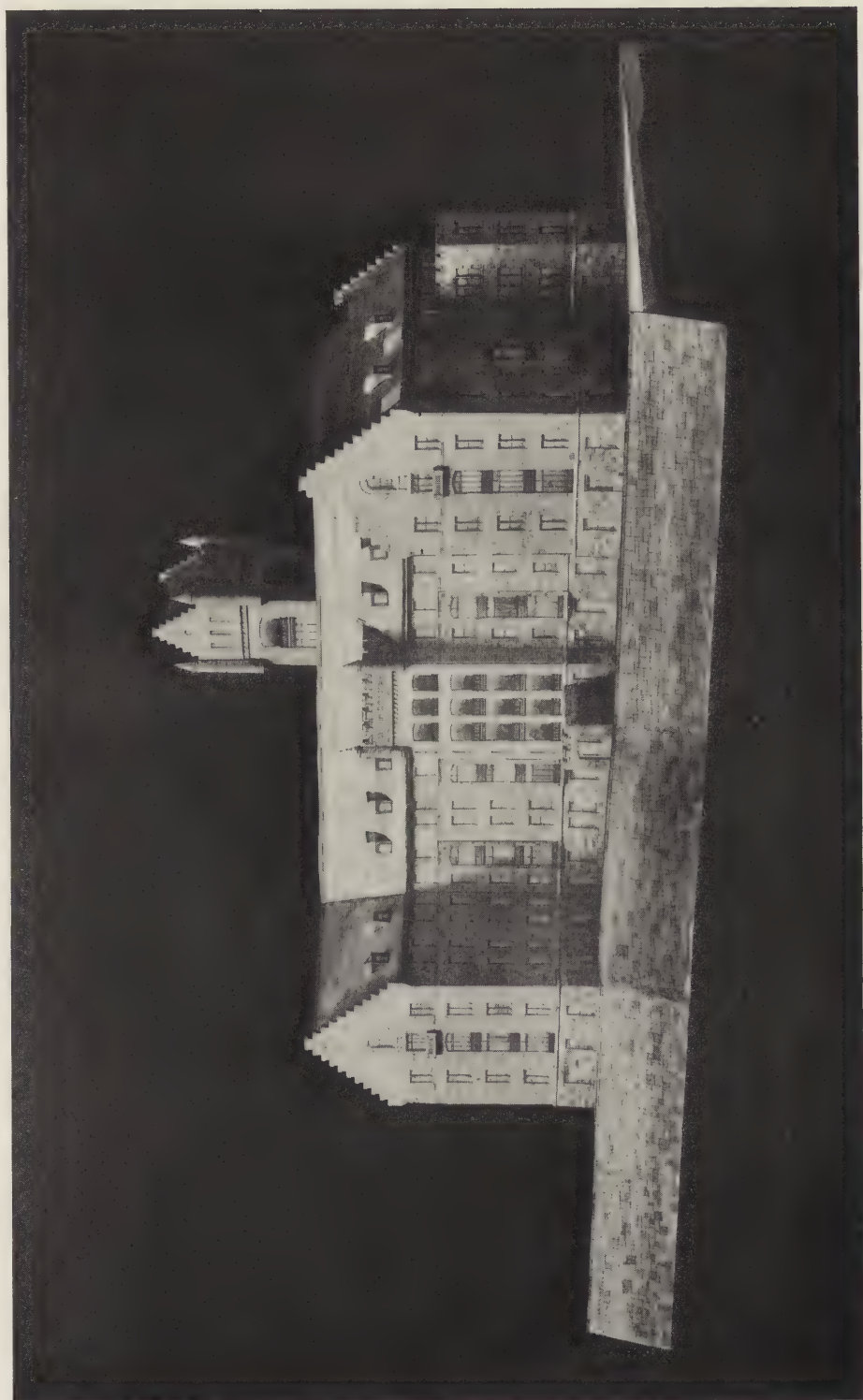


FIG. 57. SKETCH OF EXTERIOR—ROSS PAVIL-
ION, ROYAL VICTORIA HOSPITAL, MONTREAL,
CANADA. STEVENS & LEE, ARCHITECTS.



Personal Reminiscences of
CHARLES FOLLEN M^cKIM

By Glenn Brown



*M^cKim and the
White House*

JAMES HOBAN, an architect educated in Ireland, who had established his reputation in South Carolina by designing the State Capitol in Columbia, won the competition for the Executive Mansion in 1792. The building was completed under his direction. The interior, being of wooden construction, was destroyed and the exterior stone walls marred when the British piled combustible material in its rooms and set it on fire in 1814. The house was restored and completed under James Hoban about 1830. It remained with little change in its original condition until after the Civil War. From this period until the administration of Theodore Roosevelt there were constant changes in the interior, made on authority of the presidential resident, which destroyed the fitness and dignity of this beautiful building.

Under Grant's administration the East Office (as Jefferson named the one-story projections extending east and west, or the East Terrace, as it is now called), which gave an effective colonnade on the garden front, was pulled down and the East Room redecorated. The type of the decoration was furnished by the saloon of the Palace Sound steamers and this illusion was increased by installing circular settees and other furniture which went with this type of design.

President Arthur had the dignified entrance hall separated from the corridor by a stained glass screen, elaborate and costly, completing the bizarre effect by decorating the walls and ceilings with elaborate plaster relief ornaments and covering the floor with tile of brilliant colors and elaborate patterns. The frequenters of the Hoffman bar, noted in those days for extravagant beauty, would have felt at home in the entrance hall of the President's residence. The Red Room was turned over to the designer of

the Pullman Car Company, noted for the palatial interiors of their cars, and an elaborate mantel covering the better part of one side of the room and other decorations were placed in this refined room. The State Dining Room was decorated and furnished, inspired by the eating hall of the more important boarding houses so well known in Washington to the average Congressman. I do not know under whose administration this change took place. Minor changes had crept in, like the placing of the boiler and coal storage in the stately elliptical South Room of the basement, and the dignified vaulted hall of the basement had been filled with steam, hot air, plumbing, gas and other pipes, leaving scarcely passage room for the visitor. Beautiful old marble mantels, pier tables and other pieces of fixed furniture had been removed throughout the house and replaced by the commonplace stock mantels and furniture of the unfortunate period when the changes were made.

The painting, paper, cornices, wall decorations and furniture were in keeping with this period, the least affected by good taste in our history, and the White House represented the lowest ebb of the period.

The building was in the condition I have described when Roosevelt commissioned McKim, Mead and White to restore the mansion to its original dignity and good taste, so it might be a fitting residence for the head of a great nation.

There had been a determined effort to enlarge the White House under Colonel Theodore A. Bingham, Commissioner of Public Buildings and Grounds, during McKinley's administration, without the supervision of a competent architect; a scheme was presented which would have overshadowed and destroyed the beauty of the historic mansion. This unfortun-

ate enlargement came near being executed and was only stopped by the effective protest of the American Institute of Architects. Roosevelt, soon after he became President, fortunately selected the firm of McKim, Mead and White to restore instead of to enlarge the building. McKim immediately entered heart and soul into the restoration of the house, selecting for every detail the best models of French and English interiors, based upon the Italian, which influenced the original designer of the period when the mansion was erected.

The order for this work was given in the latter part of June, and the living portion of the building, according to agreement, was to be completed in November, when Roosevelt and his family intended to return to the finished house. McKim offered me the local superintendence of the work, which I accepted with pleasure. I had an inherited interest in the building, as my great-grandfather, Peter Lenox, was clerk of the works and superintendent under Hoban for fifteen years. Added to this interest was the fact that for years I had been devoting myself to the study of the history and design of early government buildings.

McKim gave his whole attention to design, from the broadest principles controlling the relations and unity between the larger elements of halls and rooms down to the minutest details of mantels, stucco ornaments and lighting fixtures.

The broad principles of the work consisted in restoring the terrace on the east, removed during Grant's administration; removing the greenhouses and propagating beds, which had increased in number and size with each administration until the West Terrace was covered and screened by them and hothouses bid fair to cover the South Garden; removing the President's public offices from the residence to a separate structure; restoring the interior from the ground to the roof; and refurnishing the principal floor.

While McKim was maturing his designs and the drawings were being made, the building as it existed from the ground to the roof was being torn out, leaving only the walls, windows and upper floors. The first floor joists were removed to make at

least this part of the building fireproof. One of the first directions given to me by McKim was to get all the pipes and ducts out of the basement corridor and restore it to its former vaulted dignity, and clear the boilers from the elliptical room, as this was to be the diplomats' lobby and cloak room, thus giving a convenience they did not have in the house. This direction meant excavating for a cellar for the heating apparatus and large conduits under the basement for ducts, heating coils, gas, plumbing pipes and electric wires. These utilitarian measures went on while the drawings were being prepared.

In his studies for the East Room McKim found that the four great chimney breasts which projected two feet and a half into the room decreased its apparent size, as they cut it into three parts.

The contractor said it was nearly impossible to change the flues in these breasts. McKim, in his quiet, sympathetic way, pointed out to me the advantages to be gained if we could take off about two feet from each projection. "Why," he said, "it would be worth five thousand dollars in the appearance of this room to get them out of the way." "If you want it, I will get them out of the way," I said.

The projections of the chimneys were reduced the desired amount and the flues were cut back into the brick walls, which were found ample to carry them, much to McKim's pleasure and to the added dignity and importance of the room.

In excavating for the East Terrace foundations, the drawings having been made to duplicate the terrace on the west, we found beneath the ground the foundation of the old colonnade, and the new columns fitted the old foundations on which they were placed. Work went on day and night and before the structural work was complete the finished interior work began to arrive.

An example of the thought McKim gave to what would be considered by many an unimportant detail is shown by the consideration given to the parapet on the north area wall, over which a rather crude iron railing had been erected. Should it be a solid wall, should it be a stone balustrade, should it be open iron work? I recollect sitting with him

on a stone in the North Garden a beautiful moonlight night, about twelve o'clock, looking at the White House and discussing or rather listening to him soliloquize on this parapet wall. Would not an iron railing affect the lines of the house behind it and attract undue attention to the railing? Would not a stone balustrade obtrude itself in the same way, only in a less degree? Would not a solid wall of the same color be merged into the house without attracting undue attention? Thus, on a moonlight night, at twelve o'clock, this question was settled to the advantage of the building.

As the work progressed, McKim gave each detail his attention as it went into place. He did not hesitate, although the time was so limited, to alter or change details which he found did not appear just as he had expected.

This seeking the best results was well illustrated in finishing the private dining room. The molded panels and cornices of this room, McKim thought, were too coarse in scale when he saw them on the wall. He had portions of them made more delicate. New moldings were made and put up, then others, until he finally selected those most appropriate.

The new moldings threw cornice ornaments and the center out of scale and these had to be removed and others secured after several trials before he was satisfied with the room as a harmonious composition.

This room was nearly done at the time these changes were made and Roosevelt and family, having moved into the bedroom floor, were demanding the use of the private dining room. McKim was inexorable in his determination to secure the best results and Roosevelt, although a strenuous President, gave way to McKim's quiet insistence. The electric fixtures throughout the house are probably the most artistic that have been designed in this country, and while outlined in design and supervised by McKim, they had the personal attention of Caldwell throughout their manufacture and installation. While all were praising the crystal chandeliers in the East Room just after they had been hung, I saw the doubtful, rather sad, expression on Mc-

Kim's face which I knew meant trouble. Then it came out: "Yes, they are very fine," he said, "but they are a little too large for the room. I would like to see them about six inches less in diameter." The remark meant that they would come down, be altered and reassembled. When this was done we could all see the great improvement. The same thing happened with the silver chandelier and side brackets in the State Dining Room. The State Dining Room is paneled from the floor to the ceiling in beautifully grained English oak and McKim wished to secure the proper shade of grey in the ceiling to harmonize with the side walls. A small sample of color was not a guide to secure the shade; it required seven coats of paint over the entire surface before the desired shade of grey was secured.

In looking over the attic, we found stored, where they had been for fifty years or more, two of the original mantels, two pier tables and a circular table, all of marble chastely designed and delicately carved, evidently of Italian importation. These rare pieces of the old furnishing had been thrown into the rubbish heap. They were brought out of hiding and replaced in the Red and Green rooms and in the corridor, where they again made fitting ornaments.

The wall covering, silk, velvet and paint, was given close study. McKim could not find a blue, such a man's blue as he desired, for the Blue Room, so he secured samples of some Napoleonic ribbed silk, made about the period the White House was rebuilt in 1814, from abroad and had some woven from this sample, that he might secure the dignity necessary in this important room, where the President usually received his guests.

The private library or office on the bedroom floor, which had been supplied with modern (in the early seventies) mantels, cornices and wall decorations, was re-established in its period by making a marble mantel based on one in the Supreme Court room of the Capitol, and the cornice was secured from the dining room in the Octagon, redrawn and designed in scale with the size of the library of the White House.

It was necessary to build a structure

for the public office separate from the residence. McKim determined to place this at the end of the West Terrace, making it one story in height, no higher than the terrace, thus making it in every way subordinate to the main building. While he considered this a temporary building, it contained all the office rooms needed for the conduct of the President's business. McKim's hope was that an adequate office building, with stately apartments, for diplomatic and other functions, might be built some time in the near future, facing the Capitol at the Executive Mansion end of the avenue, thus restoring the original idea of a reciprocity of sight between the executive and legislative branches of the Government.

This one-story office building was much ridiculed because it did not compete with the White House and was so simple in its design.

At a private dinner in Washington, among some dozen guests, McKim and Secretary of Treasury Shaw were present. The Secretary began to belittle and to ridicule the office building of the President. McKim said: "The conversation reminds me of an afternoon in Saint Gaudens' studio some years ago. The wonderful statue of Farragut, just finished, was on exhibition and a lady, handsomely dressed and stately in carriage, came in. I retired and Saint Gaudens carried her in to see the statue. After a short time Saint Gaudens returned with a cheerful countenance and whistling merrily. I said, 'Well, Gus, I know she must have been pleased with the statue, as you are so gay.' 'No,' he said, 'she did not like it. If she had I would have known it was bad.'" A broad smile ran around the table, the Secretary stiffened up, but finally gave way and joined in the laugh.

A prominent English architect, visiting this country some years ago, while making a pleasure trip, was looking over the work of various Americans with reference to awarding the Royal Institute Gold Medal, when I took him through the White House soon after it was completed. He said: "I did not think there was an architect in America who could do

such chaste and refined work, as I must confess I have been disappointed in the expensive buildings I have been going through in other cities." He then remarked: "Don't you think McKim is the American who most deserves the Royal Institute Gold Medal?" I agreed with him and have often thought that the White House work was the controlling factor of his being presented with the Gold Medal of the Royal Institute of British Architects a year later.

McKim's refinement, good taste, keen appreciation of the beauty of the old White House, together with his long study of Italian and of the Georgian adaptation of Italian Renaissance, made him the ideal man for its restoration again into a dignified residence for the President of a democratic nation.*

Entering through the East Terrace, where their wraps are deposited, guests pass into the dignified reclaimed vaulted corridor of the basement. Turning to the right, they pass up the broad, imposing stone stairway to the first floor.

From this stairway, entering the entrance hall on the first floor, they would be attracted by the dignified beauty of the room, made effective by the Doric columns which divide it from the corridor and the simple Doric cornice which surmounts the columns and pilasters, which break the wall surfaces, by the pleasing color of the halls painted in buff, by the ceiling decorated in scale and harmony with the walls, and by the floors laid in the warm grey Joliet flag stone.

They would be impressed by the magnitude of the hall, as well as by its harmonious color, refined detail and dignity in composition.

Passing from the entrance hall, they would enter the simple, chaste corridor with its segmental arched ceiling, decorated and painted to combine with the hall. Standing in the long corridor, it is sight worthy of memory to see the

*The article by the late Montgomery Schuyler, entitled "The New White House," which appeared in *The Architectural Record* for April, 1903, may be consulted for illustrations. It was written in Mr. Schuyler's best vein and is a notably fine example of American architectural literature. A full technical account of the restoration, including working drawings, is contained in Senate Document No. 197, Fifty-seventh Congress, Second Session, entitled "Restoration of the White House" (Government Printing Office, 1903).

President and his guests come down from the second story by a simple stone stairway with its delicate iron balustrade, to which McKim gave such careful thought, before marching through the hall to take their place in the receiving line. Leaving the corridor, the visitor would enter the State Dining Room, finding it a stately hall of the early English Renaissance, borrowed from Italy. The walls of this room have been paneled from floor to ceiling. Its pilasters, cornice, medallions and carved mouldings are made from beautifully veined English oak. The dark walls, the silver side lights and central chandelier, the great Worcester stone mantel, the mahogany tables, the tapestry covered chairs and the polished oak floor complete a room both artistic and dignified.

All can immediately appreciate that it is a dining hall in which our President may gracefully and adequately entertain the most cultured of our own and foreign lands.

The Red Room adjoins the State Dining Room. Here we find the walls hung with red Venetian silk velvet and the new wood work modeled from good examples in keeping with the house. One of the Italian marble mantels holds the place of honor; rich materials, harmonious colors, refined details again make this room a fitting private parlor for the Executive Mansion.

From the Red Room you would pass into the Blue Room, where the President usually receives his guests at receptions.

The walls of this room are covered with heavy ribbed blue silk, woven from a sample of silk made during the Napoleonic period. The color suggests the stately receptions of the Empire.

The mantel in this room has been patterned after the well-known example in the Petit-Trianon and the furniture is in the Empire style, covered with silk in

harmony with the wall hangings. We feel that this is a room in which our President may receive the most cultured guests of this and other countries without fear of shocking their good taste.

On the way to the East Room you pass through the Green Room, where the walls are hung with a pleasing olive shade of green Venetian silk velvet. The second Italian mantel resurrected from the garret has been placed in this room; the furniture is designed from the best models of the period in cream white. The smaller chairs were copied from a chair owned by Frank Millet, which he said originally belonged to Marie Antoinette.

The room as redecorated and furnished forms a restful and charming parlor. From this room the visitor enters the great East Room, where we see the walls paneled from the floor to ceiling, with pilasters, panels and cornice artistically carved and beautifully proportioned, the whole composition being satisfactorily completed by a great ceiling in chaste low relief.

This room, with its graceful crystal chandeliers, its refined standards and harmonious cream colored walls, enriched by figure panels, well modeled in low relief, and its polished oak floors gives a stately hall for grand functions which only needs gaily gowned ladies to give color and charm. Leaving this room we depart by the stone stairway to the basement and out through the East Terrace.

When we look at the object lesson furnished in this chaste and beautiful building and remember the designing was commenced the latter part of June and the living portion of the finished building was turned over to the President in November, we must respect the task accomplished by McKim, Mead and White and thank Charles F. McKim for again bringing us back to the simplicity and good taste shown by the fathers of the Republic.

F. W. DODGE
— A TRIBUTE —

By Roger W. Babson

THE UNIVERSITY OF CHICAGO
PRESS





W. W. Dodge

F. W. DODGE

— A TRIBUTE —

By Roger W Babson



ON January 24, 1864, the father of building statistics was born in Melrose, a suburb of Boston, Mass. This boy was brought up according to old-fashioned New England standards, both his father and mother being from old New England stock. He was educated in the public schools of Newton, Mass., to which place his family had moved. Like most boys, when he went to work he took the first job which came along and tried two or three different things before he finally succeeded in finding the niche for which he was fitted. In view of the analytical quality which later appeared in all his work, probably the most potent of the early influences that fixed his habit of mind was a study of chemistry, coupled with a brief employment in the State Assay Office of Maine. He was an original boy, more or less of an inventive genius. What he was thinking about in those days will never be known; but we all do know that when he found the place for which he was adapted, success came at once. This boy to whom I refer was Frederick Warren Dodge.

He found his place in the world's machinery when he was twenty-seven years old, for in 1891 he founded the F. W. Dodge Company of Boston, to collect and distribute construction news throughout the country, thus making national building statistics available. Before he had been in business two years he had opened a branch office in New York, and in 1896 formed a partnership there with Mr. Clinton W. Sweet, publisher of the Architectural Record, Sweet's Catalogue, and the Record and Guide. Shortly afterward the main office of the F. W. Dodge Company was moved to New York, and branch offices were rapidly established in other large cities.

In 1912, Mr. Sweet sold out his interest in the company to Mr. Dodge, and at that time the F. W. Dodge Company absorbed all the Sweet publications. In the space of not quite twenty-five years this youth of Newton became the leading publisher of architectural and building data in America.

At the time of Mr. Dodge's death, some sixteen publishing corporations were under his control. These corporations covered every department of the building field, from the purchasing of real estate to the furnishing of the finished structure. The F. W. Dodge Company is a great factory, a great department store, a great clearing house

for engineering and architectural news. From a publishing standpoint it constitutes a systematized national business of homogeneous parts. It is a business in which the greatest economy of production and distribution is combined with the most thorough coöperation and efficiency of service.

At this point I wish to emphasize this word "coöperation." When Mr. Dodge was building up his business there was no such thing as coöperation along any business lines. The motto of the real estate operator, the architect, the contractor, and the manufacturer was "Every one for himself." The fundamental idea of the F. W. Dodge Company, on the other hand, was coöperation, and this has always been its basic principle. When Mr. Dodge first began to preach it, he found many who were willing to pay him large sums for exclusive information, but it was difficult to convince competitors that they would be better off by each paying smaller sums and coöperating with one another for the good of all. However, Mr. Dodge succeeded in accomplishing his purpose. Each time he converted a man to the idea of coöperation, it was easier to convert the next one. As soon as the law of action and reaction was allowed to work, results multiplied with great rapidity; for confidence reacts as confidence and trust reacts as trust. If Mr. Dodge had accomplished nothing else during his lifetime, he would be entitled to great praise for simply having demonstrated to the building trades of America that we are all brothers, and that one can prosper only as others prosper; that misfortune to one means misfortune to the whole industry.

In the early nineties, when the F. W. Dodge Company was founded, the prospect for a young man with slender means to start in the building news publishing business was very discouraging. The first steel skeleton building had barely been erected. Scarcely any one at that time could have prophesied the influence which steel skeleton construction was to have in connection with producing building materials and contracting for their construction. Individual building operations were comparatively small. The business of contractors (and manufacturers associated with the building industry) was more or less local in character, and the demand for building news was likewise very narrow. There were few people, for example, in Chicago or even in New York who cared to hear about building operations in Boston. The most that the Chicago builder desired in the line of information was data as to proposed buildings in Chicago.

The F. W. Dodge Company, however, adopted a novel method of issuing news. Twenty-five years ago the principle of the library card catalog, previously developed only in Germany, was being introduced in America. At first used in connection with bibliography and scholarship, the principle was rapidly being adapted to filing systems in business offices. Mr. Dodge applied it to the publication of news.

Each successive stage in the progress of a building was reported on a separate card, so that the news was presented in the form most convenient for use in a business office. The different items could be acted upon at once, or classified for attention when needed. Besides, the subscriber need receive no items except those of value to him.

On behalf of the architects, the Dodge Reports announced specific dates when bids would be received for a certain new building, thus saving valuable time for architects as well as for contractors and dealers in building materials. This plan met with prompt success. It was practical and applied coöperation. Not only did the company suit its method of publishing to the relatively primitive conditions in the building industry twenty-five years ago, but the method was broad and flexible enough to accommodate itself to the varied and complex changes which have since taken place in that industry.

Before 1893, big corporations were comparatively few in America, though not entirely unknown. After the panic of that year, the most noticeable fact in the business world was the general development of large-scale business in nearly all lines of industry. Such business needed more efficient and exact trade news than had been available before that time, and the changes and forward strides in trade journalism since then make a very interesting chapter in the history of the American publishing business.

The general introduction of steel skeleton construction gave an added impulse to the building trade and its allied industries, which no doubt would in any case have tended toward large-scale business. In order to construct the huge buildings demanded in various large cities, contracting concerns needed to have sufficient capital to specialize on large work of the kind, and building material manufacturers were also obliged to sell goods on a mammoth scale.

Naturally all this large-scale business created a demand for construction news which should cover fully all sections of the country where big construction work was being carried on. Mr. Dodge's method of publishing enabled him to meet this exacting demand with efficiency and economy. Before long his company was issuing upwards of 300,000 separate authenticated news items a year, of which one subscriber might require one hundred, while even the largest would not require more than a few thousand. Several hundred different lines of business were represented among the subscribers to these Reports, which as well served the small local business man as the great national corporations. It may therefore be said that Mr. Dodge's rise to eminence in the publishing and statistical business was typical of the industrial evolution which has taken place in America during the last quarter century and was thus identified with it.

Mr. Dodge had been an officer of the Architectural Record Company for a number of years, becoming its president in 1912. He had

a genius for seeing things in a large and sane way, and to one of his analytical bent it was natural as well as imperative that this magazine should adopt a definite policy and occupy a distinct place among his many enterprises. It strove to serve the architect in two directions; first, by placing before him the best examples of work, and again by encouraging general appreciation of good architecture. In order to accomplish this dual purpose the magazine dealt with the art of architecture rather than its practice; and to gain the confidence of the non-professional reader, as well as the architect, it excluded from its text "trade notices" and any matter which might appear to be inspired by business motives. Any technical information which might be needed could be found in Sweet's Catalogue; therefore Mr. Dodge felt all the more free to devote the magazine to the art of architecture.

In closing, I wish to say a word acknowledging my personal indebtedness to Mr. Dodge, and also to his half-brother and associate in business, Mr. Franklin T. Miller. I was greatly handicapped in the early stages of my business to secure statistics needed to compile our Composite Plot of Business Conditions. Notwithstanding the huge amounts which our government had been spending for statistics, it was almost impossible to secure in the early days any up-to-date figures which were of real value in forecasting business conditions. I was almost discouraged, when Mr. Miller consented to put the matter up to Mr. Dodge. These two men, at considerable inconvenience, and without any prospects of profit, commenced compiling for me a back record of the new building figures for the largest cities of the United States. At every point, these men were willing to coöperate for the good of all concerned. Of course, to-day conditions have changed. Thanks to Mr. Dodge and a few other far-sighted men, there has recently been as rapid an advance in the compilation of statistics as in the development of building trades. Hence, to-day building statistics are only one branch of the many barometric statistics which are available. But it was not so in the early days.



BOOKS ON COLONIAL ARCHITECTURE

By RICHARD FRANZ BACH

Curator, School of Architecture, Columbia University

Part II.—Secular Buildings (Continued)

NO record has appeared to date concerning the work of restoration of the New York City Hall.* Perhaps the Municipal Art Society, which in its usual altruistic feeling of solicitude toward all works of fine art destined for public consumption, had much to do with the original idea of restoring the building, will at some time undertake a more definite published record of its success in this part of its chosen field. The opportunity could not be better timed for a complete history of the City Hall, within and without and including the portable objects, not so imposing, of course, as Glenn Brown's *History of the Capitol*, but equally important. This should be a volume of carefully measured drawings, with accompanying photographs and a thorough text record of the life story of the early national center. It is high time that the great metropolis recognized the educational

value of its architectural heritage. What is more, a conscientious piece of work undertaken in New York may prove the first of a series of similar records published by other cities or local organizations with the preservation and restoration of public monuments in view. Out of the series, in turn, may grow a comprehensive body of authoritative information concerning our important public buildings of the early time.

In the meantime the buildings grow older, many are falling into decay, many others have been sold to housewreckers. Only occasionally does one hear of a structure handed over to a society which lends its funds toward the preservation of landmarks or to a public department of a city, as was done recently in the case of the Dyckman house in New York. Thus the old State Capitol of New York was superseded by a larger structure, but there is no published record available for students beyond what may be gleaned from the descriptions in the *Annals of Albany* and similar publications mentioned previously. The history of the buildings of the University of Virginia

*A description of this work, together with a history of the City Hall, based upon a search of documentary sources, including those of McComb's drawings that have been preserved, is in preparation for The Architectural Record by Charles C. May, of the office of Grosvenor Atterbury.

has never appeared in printed form useful for architectural study, although we are aware of manifold efforts in this direction in connection with a general study of the drawings by Thomas Jefferson undertaken by Professor Fiske Kimball of the University of Michigan. This gentleman has published several articles in the Harvard Architectural Quarterly, which recently suspended publication, and in the Journal of the American Institute of Architects on Jefferson's designs for various edifices, and we are given to understand that these papers are preparatory to an inclusive work in folio in which will be reproduced the majority of the presidential amateur's drawings now in the collection formed by Mr. T. Jefferson Coolidge. This is scheduled to appear in published form in the coming spring. The subject is likewise very ably handled, though from a more inclusive point of view, in *Thomas Jefferson as Architect and a Designer of Landscapes* by William Alexander Lambeth and Warren H. Manning. This was published in 1913 (Houghton, Mifflin Company) in a limited quarto edition; only five hundred and thirty-five copies were issued. The volume is, however, still available. It is a careful work, well illustrated by views of Farmington, Monticello and the University of Virginia, as well as by twenty-three plates reproducing Jefferson's drawings for a number of plans and elevations, as well as specifications and calculations in facsimile, and even including suggestions for a bell to ring the hours automatically. Mr. Lambeth's position as Superintendent of Buildings and Grounds at the University of Virginia rendered him particularly well qualified for his work, while Mr. Manning's training as a landscape designer lent him likewise an even judgment in the interpretation of Jefferson's remarkable results, achieved without professional training and based solely upon an innate art appreciation.

In connection with Jefferson's work at Charlottesville, we are also mindful of a series of articles in The Architectural Record by the late Montgomery Schuyler on *The Architecture of American Universities*, in which the Virginia group

received due attention, issue for July, 1911. This material, as well as much else that has been printed in a number of other periodicals, will appear in due time in connection with a later part of the bibliography of the literature of Colonial architecture, to be published in a future issue of The Architectural Record.

It is altogether fitting that mention should be made, as part of the present discussion, of a type of book which belongs properly in any category of works on the subject of Colonial architecture, a type of book which offers not only history or theory, but essentially a few direct lessons in simple appreciation and understanding based upon historical examples, and intimately related to modern practice. Such a volume is that by Herbert C. Wise and Ferdinand Beidleman entitled *Colonial Architecture for Those About to Build*, being the best examples, domestic, municipal and institutional, in Pennsylvania, New Jersey and Delaware, with observations upon the local building art of the eighteenth century. (J. B. Lippincott Company, Philadelphia, 1913; crown octavo, pp. xv+270, 207 ill., index. \$5.) This is a conscientious effort in the direction of the elevation of public taste; and the effort may be considered a highly praiseworthy one, when we reflect upon the multifarious sins that have within the knowledge of most of us been committed in the name and formal guise of Colonial architecture. The authors have restricted themselves to the middle region of the old revolutionary territory, saying, "New England and the South as regions of characteristic modes of building have been well covered; but it has seemed* to us that the Colonial buildings of Pennsylvania and contiguous territory have not been adequately portrayed. A very small proportion of New England Colonial work is of other material than wood. A rigorous climate there caused peculiarities of structural detail and of the laying out of buildings and of groups of buildings. In the South a manorial scale of living called forth ambitious architectural schemes in accord with aristocratic ideals. In the Pennsylvania Colonies a mean is to be found."

The subject matter of the book is subdivided chiefly according to type of building, and additional information is given on such subjects as the Carpenter's Company, building materials, and the plan and design of early buildings in general. Throughout the reviewer is aware of a thorough understanding of the field on the part of the writers, a sympathetic appreciation of Colonial intentions and a sane interpretation of Colonial results. The volume will prove of great value as a general work on our early building art and has surely added much material to our records of Colonial architecture in the middle region of the original United States. The photographs are of excellent quality, the subjects well chosen, the type clear. Our only suggestion toward a possible improvement, if improvement it be considered, would be the addition of a more directly descriptive subtitle on the cover, giving a closer definition of the author's purpose. The title as it stands brings to mind definite principles of planning, structural details, and, what is more, encourages the reader to expect modern adaptations in illustration.

It is fortunate, of course, that Messrs. Wise and Beidleman were able to avoid that particular field in their valuable work, for, without doubt, the quality of their result could not have benefited by the addition of modern examples.

Fortunately, also, it was deemed advisable in this volume to eliminate all personalities, genealogies and records of ownership and occupancy of the buildings discussed. Writers upon this and allied subjects readily wander into the fascinating but architecturally usually irrelevant field of community and family history. The introduction of such material has rendered many a volume but a regurgitation of previous works, and the avoidance thereof in the present instance except upon the limited number of occasions when "the old chronicler has been permitted to put the story in his own quaint words, which alone bring the reader into terms of intimacy with the circumstances surrounding the work of building," has doubled the architectural value of the book.

In the next paper of the series on the literature of Colonial architecture, we shall begin the discussion of volumes concerning the much more prolific field of the early dwellings.

Before concluding the present survey of the literature dealing with the secular buildings, we wish, however, to add the following paragraphs, which logically should have formed part of the prefatory sketch reviewing the principal extant buildings of this class:

The early secular buildings of Maryland must be sought chiefly in Annapolis and Baltimore. The first had been the old capital city, commercially as well as in government. But it was superseded in the former capacity by the larger centre of Baltimore before the Colonial period was well over, and the resulting stagnation in Annapolis has left us that city almost intact as a monument of a by-gone style. The secular buildings in Annapolis include St. John's College, dating from 1744, and the State House by Joseph Clarke, begun in 1772 and recently much increased in size and thoroughly restored. Charleston, South Carolina, still preserves its undoubtedly altered old Post Office, and Newport its Redwood Library, designed by Peter Harrison and finished in 1750.

But the most significant secular work of the Colonial time was produced in Boston and in Washington. In Boston are the now altered Faneuil Hall and the State House, about which many an architectural skirmish has been fought. The latter was the work of Charles Bulfinch, born 1763, who brought into being the most monumental structure in the United States up to that time, illustrating incidentally the first use in this country of an order placed over an arcade, according to the precedent set by Mansard at Versailles. This building served as a source of ready imitation for minor public edifices at other places, frequently with the result that inexorably attends the torturing of largely conceived designs into the smaller scale forms expressing the needs of less important buildings. It is interesting to note in passing that Bulfinch has to his credit also the erection of the first theatre in

Boston in 1793, a remarkable concession for that stronghold of Puritanism at so early a time in its history. The first theatres in the territory of the United States at large, however, were erected more than forty years earlier at Williamsburg, Virginia, and at Annapolis, Maryland. There is record of a playhouse at the latter city in 1771, while the date 1751 appears in the local annals as that of the second theatre built at Williamsburg.

The crowning public work of Colonial times is, in point of size and importance architecturally, as well as in point of national significance, the fine Capitol Building at Washington, the design of an amateur—this time a West Indian physician—Dr. Thornton, later much modified by a number of persons and finally completed by dint of several additions to the fabric—not the least of which was a cast iron dome—in a thoroughly Roman feeling. Begun as our greatest Colonial edifice, the National Capitol itself fell subject in no indefinite sense to the classicalizing tendency that is the keynote of monumental design during the period of the Revivals. Still it is not for that reason less characteristic of our own growth, for in its stones in their progressive additions our history is written. The growing pile kept pace with the increasing number of stars in the national flag; the finished work is a congeries of the efforts of many years, curiously wrought into a splendid whole which—despite its much maligned dome—is a fit representation of a nation that has grown by similarly varied steps.

A Correction.—In the *Architectural Record* for August the editor of *The Georgian Period*, Mr. William R. Ware, was also credited with being the founder of the School of Architecture at Columbia University. As a matter of fact, there were two members of the same family, uncle and nephew, bearing the name William R. Of these, William Rotch Ware, not Professor Ware, was the editor of the volumes mentioned, while William Robert Ware was the dean of the profession of architectural teaching, also mentioned in the text referred to above.

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Note: In the preparation of these lists, it is obvious that no space can be given to annals, chronicles and geographic or historic works other than such mention as they may receive in the text. Although some works are included which are not distinctly architectural, they have nevertheless a direct bearing upon the subject matter. In the same manner an occasional title may fall in point of time slightly beyond the limits of the period under discussion.



The Critic Defined.

In a recent issue of *The New Statesman* we have come upon a concise statement of the requirements rightfully to be exacted of our critics. Mr. A. H. Hannay writes: "If all that art criticism does is to discover genius, then there is no such thing as art criticism as contrasted with art; there are simply two types of artists—the creative and the recreative; the producers and the appreciators. . . . If art criticism is a different activity from that of artistic creation, then it must produce something different—something of which art is the antecedent condition, but not the substance. . . . It seems . . . that art criticism does . . . more than merely express approval and disapproval, discover genius, and lay bare charlatanry: it *explains*." Strength to your pen, Sir. Criticism does explain. We find "explain" defined as "to make clear or intelligible," and we might surmise that the editor of the dictionary had some inkling of the trend of fine arts in this eclectic century when he so defined the word. Were our work intelligible, we might in great measure reform the whole of present critical method. This has been sadly warped to an alien purpose, that of "making intelligible." Why should our art have to be made intelligible? What is there in it that is cryptic? Or does it describe a graceful curve above the heads of those who need it most? If art is the expression of life, it should be naturally assimilated by the mind, as the stomach takes food. Our critic's true function lies in a different channel. He should be a person gifted with superhuman breadth of vision, toleration and a firm conviction of the relationship existing between life and art. His purpose, in accordance with these requirements, should not be to waste his effort upon the Gordian knots of art, seeking a meaning, finding in works a significance

never confided to them by their authors, trying to make clear the artist's purpose; for if the artist's purpose is so concealed as to require the critic's sharp sight to ferret it out then his product need not interest us. The critic should rather approach his work through the channel of the contemporary life, for of that the figure or the building or the canvas is an infallible record. Mr. Ralph Adams Cram says, in his usual straightforward fashion: "You cannot sever art from society; it follows from certain spiritual and social conditions, and without these it is a dead twig thrust in sand, and only a divine miracle can make such bloom." It shall not be the critic's purpose to water the dead twig. Too many of his tribe now pay too little attention to the forest of living trees that cry for interest, the myriad trends and impulses that seek guidance, direction and unification. Study life, ye critics; it is yet greater than art.

A Public Bathhouse at Pompeii.

Among the remains of buildings excavated at Pompeii is a suite of public baths, admirably arranged, spacious, and highly decorated. On a wall of one of the courts of these baths is a Latin inscription which, when translated, reads: "On occasions of the dedication of the baths, at the expense of Cnæus Alleius Nigidus Maius, there will be a chase of wild beasts, athletic contests, sprinkling of perfumes, and an awning. Prosperity to Maius, chief of the colony." In this way, imitating the example of Rome, the baths were dedicated to the public.

The baths (*thermæ*) formed an irregular quadrangle, about 162 feet long, with an average depth of 174 feet, and were divided into three separate compartments. One of these was appropriated to the furnaces and the servants, while the other two were each occupied by a set of baths, contiguous to

each other, and supplied with heat and water from the same furnace and reservoir. The apartments and passages were paved with white marble in mosaic.

Originally the baths for men and women were united, for convenience and economy of fuel; but later all direct communication between them was cut off.

The Pompeian baths were built solely for bathing, and are not comparable therefore with the Roman baths of their period, which included porticoes for walking, halls and courts for games and combats, as well as apartments for lectures and recitations.

The first chamber in the Pompeian bath under notice was, as usual, the "tepidarium," with a warm but soft and mild temperature, which admirably prepared the body—as in our modern Turkish baths—for the more intense heat of the vapor and hot baths. The wall was divided into a number of niches by male figures (Telamones), two feet high, in relief, and supporting a rich cornice. The ceiling was worked in stucco, in low relief, with scattered figures and ornaments of little flying genii, delicately relieved on medallions, with foliage carved around them. The ground was painted red and blue.

From the "tepidarium" the bathers entered the "caldarium," or vapor-baths.

On one side of this room was the "laconicum," containing the great vase, "labrum." This was a large round basin of white marble, over five feet in diameter. Into it the hot water bubbled up through a pipe in the middle, and served for the partial ablutions of those taking the vapor-baths. The "labrum" was raised about three feet six inches above the pavement on a round



ROOM IN PUBLIC BATHHOUSE AT POMPEII.

base built of small pieces of stone or lava, stuccoed and colored red, and about five feet six inches in diameter.

The "laconicum," which was well stuccoed and painted yellow, was provided with a highly enriched cornice, supported by fluted pilasters at irregular intervals. These



RECEPTION ROOM IN PUBLIC BATHHOUSE AT POMPEII.

were red, like the cornice and ceiling, which was worked in stucco with little figures of boys and animals.

On the opposite side of the "caldarium" was the hot bath, or "lavacrum," whose length was twice its width, and through whose hollow pavement and walls the heat was admitted.

The women's bath was smaller and less ornamental than the men's, but was heated by the same fire and supplied with water from the same boilers. The robing-room contained a cold bath and was painted with red and yellow pilasters alternating with one another on a blue or black ground. A light cornice of white stucco was provided, and also a white mosaic pavement with a narrow black border.

From this room the "tepidarium" was entered. It was painted yellow with red pilasters, lighted by a small window high above the ground.

The construction of these baths plainly manifests an excellent style of architecture, which was somewhat marred by such errors as a neglect of symmetry in certain particulars, or a pilaster being cut off by a door passing through the middle of it.

Under the porticoes of the bathhouses above described was found a sun-dial, consisting of a half circle inscribed in a rectangle. It was supported by lion's feet, and was elegantly ornamented.

R. I. GEARE.

A Praiseworthy Innovation at Columbia.

Columbia University has inaugurated a notable experiment in co-operation between the teaching and the practice of architecture. On the assumption that nothing but good could accrue to both school and profession through a proper understanding and reciprocal appreciation of one another's provinces, the university authorities decided to invite three architectural societies of New York City to elect three practising architects each, to form a Committee of Visitors, whose advice as based upon periodic inspections of the school's plant or equipment, current work and mode of teaching could be depended upon as a guide in checking up scholastic results by professional standards and demands. The three so-

cieties and the elected members from each to compose this committee are the following: From the New York Chapter of the American Institute of Architects—Bertram G. Goodhue, Charles A. Platt and Egerton Swartwout; from the Society of Beaux-Arts Architects—Thomas Hastings, Henry F. Hornbostel and Lloyd Warren; from the Alumni Association of the School of Architecture of Columbia—Goodhue Livingston; John Russell Pope and I. N. Phelps Stokes.

The committee in question is purely an advisory one, but its work is none the less of great administrative value. Its recommendations will be the upshot of frequent attendance at the school, and, once submitted, it will be the function of the authorities of the school to make proper adjustment wherever academically feasible to accord the existing curriculum with the most urgent practical demands of the great body of architects who employ its graduates.

We may frankly say that Columbia deserves the utmost credit for its initiative in thus accepting the professional world in a definite way as its pacemaker. There should be no apprehension on the supposition that it is now planned to translate the school into terms of the office, for there is not sufficient synonymy of purpose in the two fields, however closely they may be allied in the order of supply and demand. The school must in the final balance maintain its academic point of view; it cannot be made to assume—except in its design branch alone—the guise of the atelier; for the proper quantities of historic, theoretic, scientific and cultural material, not to mention untold hours of drawing, modeling and construction, must hold their place in the well rounded and closely co-ordinated system of teaching. The Committee of Visitors, then, will not attempt to govern but to advise. The technicalities of administrative control will remain as heretofore in the hands of the Administrative Board. On the other hand, the committee will call into play its hard bought experience, its knowledge of the fundamental demands of practice, as well as its cherished ideals of a great art ingrained through many qualitative tests, so that the scholastic intention may be brought to a full grasp of the objective of professional practice.



MELODY FARM, THE COUNTRY HOME OF J. OGDEN ARMOUR, Esq., Lake Forest, Ill.: Arthur Heun, Architect By Peter B. Wight	Page 97
THE PENN MUTUAL BUILDING, Philadelphia: Edgar V. Seeler, Architect By Harold D. Eberlein	122
THE ALBANY ACADEMY. Part I. Text by G. B. Cutler. Measured Draw- ings by J. L. Dykeman and F. J. Ricker	132
THE BARRETT APARTMENT HOUSE, Chicago: Richard E. Schmidt, Garden & Martin, Architects By Wm. D. Foster	144
THE GOBB BUILDING, Seattle: Howells & Stokes, Architects By John J. Klaber	154
PORTFOLIO OF CURRENT ARCHITECTURE	161
PERSONAL REMINISCENCES OF CHARLES FOLLEN McKIM. Part IV. McKim's Way By Glenn Brown	178
THE ARCHITECT'S LIBRARY: Books on Colonial Architecture. Part III. Dwellings By Richard F. Bach	186
NOTES AND COMMENTS	191

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FIG. 21. VIEW THROUGH PORTE-COCHERE
—MELODY FARM, LAKE FOREST, ILL.

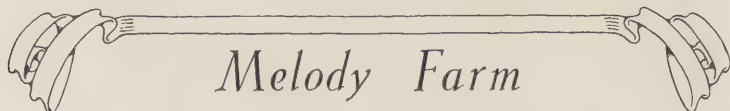
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Melody Farm

*The Country Home of
J. Ogden Armour, Esq.,
Lake Forest, Ill.*

Arthur Heun, Architect

By Peter B. Wight

IN an article in the issue of the Architectural Record for October last, an attempt was made to describe the conditions on which progress in the designing of country houses in the Middle West in recent years has depended. Numerous illustrations of the present condition of the art were given, and in addition to these there appeared in the December issue pictures of six more houses of the same kind, which had been crowded out of the October number for want of room. The illustrations were mostly of houses of moderate cost. It is now my privilege to illustrate and describe a house and garden in the planning and design of which limitations of cost are not evident; and carried out on a scale that has seldom been equalled in any other country home in America. But lest the reader should infer that

"scale" is a controlling merit in the present instance, let it be here understood that mere bigness has had no influence upon the writer. It is only an accident which gave the architect the free hand to express himself in a large way; and in so doing he has not allowed his good taste and artistic feeling to be overmastered by the exceptional opportunity that came in his way. Neither has the writer hereof any desire to describe and illustrate it so fully as is now attempted, had he not been impressed with the idea that it expresses ideas of rationality and beauty not less than of modesty and fitness.

Six years ago Mr. J. Ogden Armour, of Chicago, whose name is a figure in modern business not only in America, but throughout the world of trade and commerce, bought to satisfy his desire to provide for the rest of his life and that

of his family, a country place which would not only provide them with all the comforts of home that they could ever hope for, but which would be large enough to supply him with a field for exploitation and development during many years to come; in which when the cares of business may have been laid aside and entrusted to others he might enjoy farming and every other thing that the cultivation of land comprises and implies, under his own direct observation. For Mr. Armour is only now beginning the period known as middle life, and has many years of cheerful prospect before him.

He first satisfied this desire by purchasing several contiguous farms comprising twelve hundred acres or more, situated only thirty miles from his home in Chicago. This property is west of Lake Forest, which since 1870 has been the favorite site for the country residences of the wealthy and cultured business men of Chicago. Lake Forest, the farthest from the city of Chicago's suburban settlements, is a natural woodland, divided into building sites with more or less garden surroundings; it is not farm land, because its native trees are its best asset. Mr. Armour's place is located west of the C. M. and St. P. R. R., which runs through one corner of the farm, and it possesses only a few patches of natural forest. Hence it is in every sense a farm and is intended to be cultivated as such. Not more than forty acres are devoted to house and gardens and the rest will be cultivated as opportunities are offered and disposition is inclined. Permanent farm buildings have not yet been erected or planned. Therefore only the house and gardens are of any concern to us at present.

Mr. Armour, in building the house and laying out the gardens, did not so much consider his own desires as those of his wife, his daughter and one who had not the least consideration—his mother. He only desired to make it their country home—and he has succeeded; for it is what might be called a self-contained house in that respect, like many of the old English manor houses; but it is still very near to the large number of good neighbors residing in that part of Lake Forest which lies between the C. M. and St. P. R. R. and Lake Michigan.

He selected as his architect Arthur Heun, of Chicago, than whom he could have found no more sympathetic and enthusiastic coadjutor. Mr. Heun is one of the younger Chicago architects who are known for their artistic accomplishments and progressive tendencies. He has had control of all the work, which required nearly two years in its accomplishment, having engaged other professional help, such as that of engineers, landscape executants, and gardeners to carry out the designs, which were entirely his own. The house was completed and the gardens were practically laid out and graded four years ago. The growth since that time only up to the summer and fall of 1915 is therefore shown in the photographic illustrations.

To make the illustrations most intelligible to the reader, they have been arranged in such order as that in which one would make a tour of the premises, which Mr. and Mrs. Armour have kindly placed at the disposal of the *Architectural Record* for the time being.

The visitor, arriving by train or from Lake Forest by other conveyance, is first driven over the concrete bridge built by Mr. Armour which spans the tracks of the C. M. and St. P. R. R., and on a perfectly made road through a piece of natural forest, shown in Fig. 1, from which he emerges to get the first general view of the house and attached outbuildings. This forest is the only natural woodland on the site.

The road then winds around, turning somewhat away from the house at first, and then toward the east entrance, which is approached by a straight road from which most of this side of the house is seen in elevation, as in Fig. 2. This leads into the forecourt, in the center of which is a fountain around which the road turns in a circle, passing the loggia at the main entrance and continuing to the right through the porte-cochere, which is under the northeast wing of the house, between the office and the side entrance (Fig. 3). This road continues on in a northerly direction toward the stables and garage. Fig. 4, reproduced in color on the cover and looking in the same direction, gives a better view of one of



FIG. 1. MAIN DRIVE JUST BEFORE IT REACHES THE OPEN GROUND UPON WHICH THE HOUSE IS BUILT—MELODY FARM, LAKE FOREST, ILL.

the observation towers. It will be observed that rooms in the second story extend over the porte-cochere and most of the loggias, so that the second story covers more area than the rooms of the main floor. There is no third story except in the two towers. Fig. 5 is another view in the same direction showing the entrance porch and the porte-cochere, and Fig. 6 shows the detail of the entrance porch and the beautiful loggia over it. This picture gives the best view of the overhanging eaves which surround the whole building and the relation between the marble work of the exterior and the stuccoed brick walls, which are everywhere finished the same. Fig. 7 is a view close up to the entrance to the porte-cochere, giving a vista of the road to the garage and beyond the arch, and the marble details of the second story.

We are now supposed to have entered the house through the large entrance loggia and vestibule and are standing near the north end of the grand central hall, from which we have the view shown in Fig. 8. We are looking south, and the

main door through which we have entered from the vestibule is between two Chinese vases on pedestals and opposite the central table on which are chrysanthemums. This hall is 20 feet wide and 112 feet long. At the far end as we stand is the open fireplace concealed by the bunch of flowers, on each side of which are open arches which connect with a corridor. From this corridor are three glass doors connecting with a loggia still farther on, a door on the right leading into the living room, one on the left leading into the music room. In this view of the central hall the five double doors to the right lead into the winter garden, which is on the west side of the house. Fig. 9 is a view of the central hall looking toward the main stairway, which is at the north end. Here the five doors to the winter garden are on the left and the opening on the right where the columns of Caen stone are shown is into the palm room. Fig. 10 is a view of the great marble stairway leading to the second story. It is very plain, but has bronze railings. Observe the care that

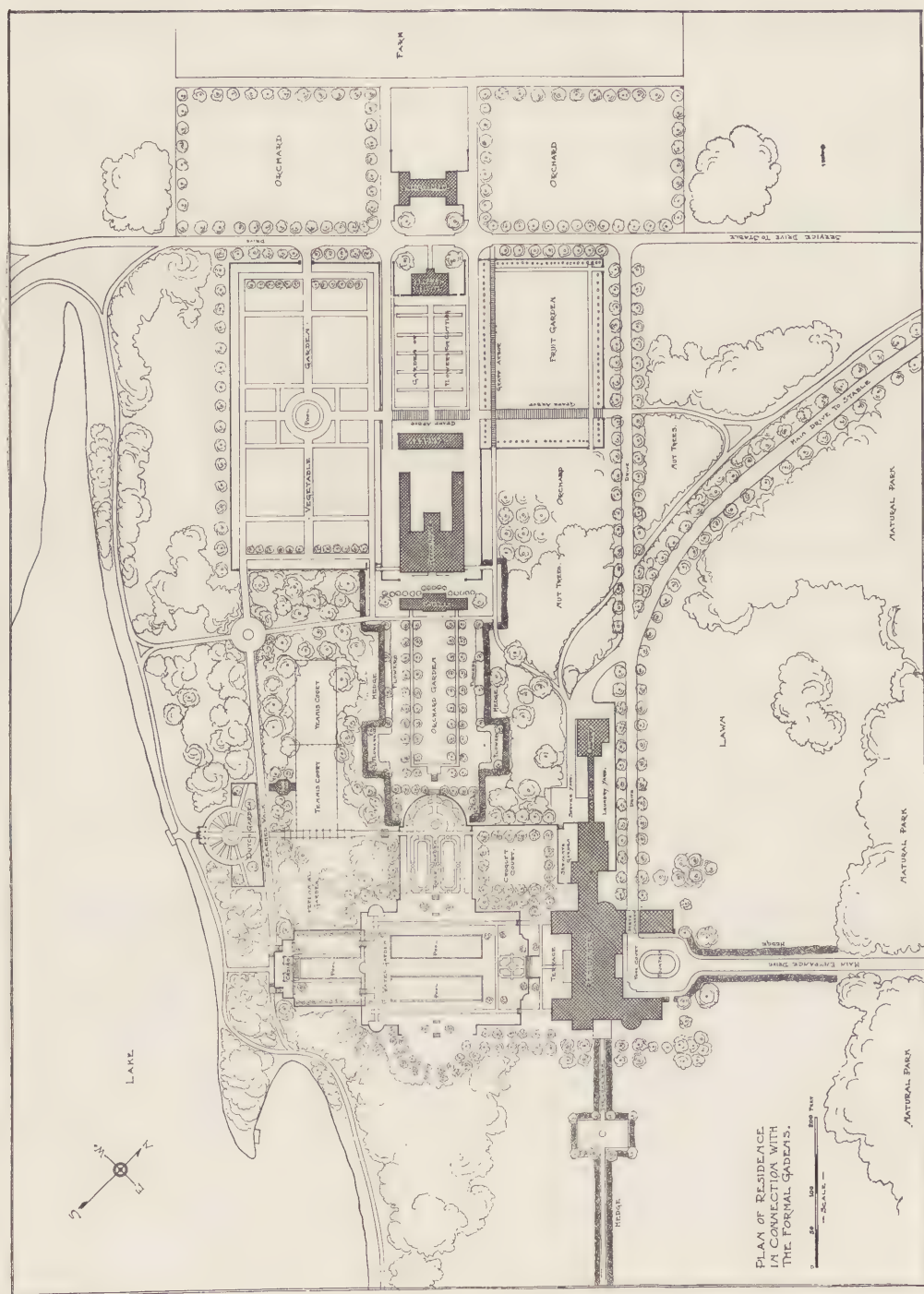


FIG. 1a. MELODY FARM, COUNTRY HOME
OF J. OGDEN ARMOUR, LAKE FOREST, ILL.



FIG. 2. MAIN APPROACH AND FORECOURT
—MELODY FARM, LAKE FOREST, ILL.

must have been taken to weave the rug so as to fit the curvatures of the stairs. This illustration shows also the details and carvings of the walls of the main hall, which are entirely lined with Caen stone built up in blocks against the brick wall. The floor of the main hall is of marble tile, but is almost entirely covered with rugs.

Our itinerary now leads us to the other end of the main hall. There we pass out through the arch at the left of the fireplace and, turning to the left, enter the music room through a double door, opening from this short corridor, which connects the three large rooms at the south end of the house. Fig. 11 is a general view of the music room looking east. Near the far end is a transom beam supported by two piers, rendered necessary by the construction of the second story and serving to relieve the great length of the room, for this room measures 68 by 25 feet on the floor. The floor, by the way, is of marquetry in large patterns, having only one large rug in that part where there is an open fireplace. The beam and piers forming a partial screen at the east end, serve to cut off the organ section, so as to leave the remainder of the room in good proportion for symmetrical treatment, with fireplace in the center, and opposite to it a large semi-circular bay window on the south side, the opening to which is only suggested in the illustration. The pipe organ is at the east end, and is in two sections covered with open metallic screens, which entirely conceal it. Between these sections is a large triple window in which, when the picture was taken, the shades were drawn down preventing a glare of light which would have spoiled the photograph.

A good idea of the inside finish of the large rooms on the main floor (except that of the dining room, which is of colored marbles and not illustrated) is given in this picture. There is, however, considerable difference in the decorative treatment of the main rooms.

Nothing has been said thus far of the architectural details of this building. But it is patent that the reader must have observed that the exterior of the house does not pay tribute to any of the so-

called "historical styles." Superficial observers only have called it an Italian villa, which it is not. It is only a rational rendition of the plan and materials which the architect decided to use, and its beauty, which no reasonable person can deny, is due to the discreet use of these materials and the absence of all straining for effect. The house is neither a villa nor a palace, as its great size might have suggested. It is merely a country house after all, built for a family of good taste and refinement by an architect who understood all the conditions that affected it in the making, with a sincere desire to do the best that he could, untrammelled by any outside artistic influences. It speaks for itself, and illustrates the culmination up to the time when it was built, of all the influences that are making the country house architecture of the Middle West what it is. The decorative features of the materials used in the finish of the interior are only slightly related to those which prevailed in Italy, and especially in Venice, in the early days of the Renaissance. But they are more delicate and more refined. The details are not prominent or glaring, as was sometimes the case in Italian work, but are subdued and diminutive in detail, so much so that they are hardly evident in the pictures except on the ceilings of such rooms as are decorated in those parts. The reductions by photography are therefore such as to make it difficult for the reader to examine them properly.

We will now return to the great hall and pass into the winter garden, which is the center of the house on the west side of the hall. Its size is 55 feet 6 inches in length by 24 feet in width (Fig. 12). It is the most attractive room in the house, and is furnished with every imaginable comfortable appliance and decorated with many works of art; a room adapted to family gatherings and the entertainment of many guests. The decoration of the upper walls is too delicate for present description, and may be a field for discreet treatment with color; that of the lower walls, suggesting lattice work, is an intimation that we are approaching what far surpasses all that art may do. It is the most direct and natural approach to the water garden,



FIG. 3. FORECOURT LOOKING TOWARDS PORTE-COCHERE-MELODY FARM, LAKE FOREST, ILL.



FIG. 6. ENTRANCE PORCH—MEL-
ODY FARM, LAKE FOREST, ILL.



FIG. 5. ENTRANCE PORCH AND PORTE-COCHERE—MELODY FARM, LAKE FOREST, ILL.



FIG. 7. DRIVE TO GARAGE THROUGH PORTE-COCHERE—MELODY FARM, LAKE FOREST, ILL.



FIG. 8. MAIN HALL, TOWARD SOUTHERN PORCH. ON RIGHT, DOORS TO WINTER GARDEN; ON LEFT, OPPOSITE TABLE, ENTRANCE FROM VESTIBULE AND PORCH—MELODY FARM, LAKE FOREST, ILL.



FIG. 9. MAIN HALL, TOWARD MAIN STAIR-
CASE—MELODY FARM, LAKE FOREST, ILL.



FIG. 10. MAIN STAIRCASE AT NORTH END OF
MAIN HALL—MELODY FARM, LAKE FOREST, ILL.



FIG. 11. MUSIC ROOM AT SOUTH END OF MAIN HALL. THE PIPE ORGAN FILLS THE TWO DISTANT CORNERS—MELODY FARM, LAKE FOREST, ILL.



FIG. 12. WINTER GARDEN, FROM ONE OF THE DOORS IN THE DINING ROOM. AT FAR END ARE ENTRANCES TO THE LIBRARY, WHICH LIES BETWEEN THIS AND THE MUSIC ROOM. AT LEFT IS MAIN HALL AND AT RIGHT ARE THE DOORS TO THE WEST TERRACE AND WATER GARDEN—MELODY FARM, LAKE FOREST, ILL.



FIG. 14. CASINO AND TERRACE AT WEST END OF WATER GARDEN—MELODY FARM, LAKE FOREST, ILL.

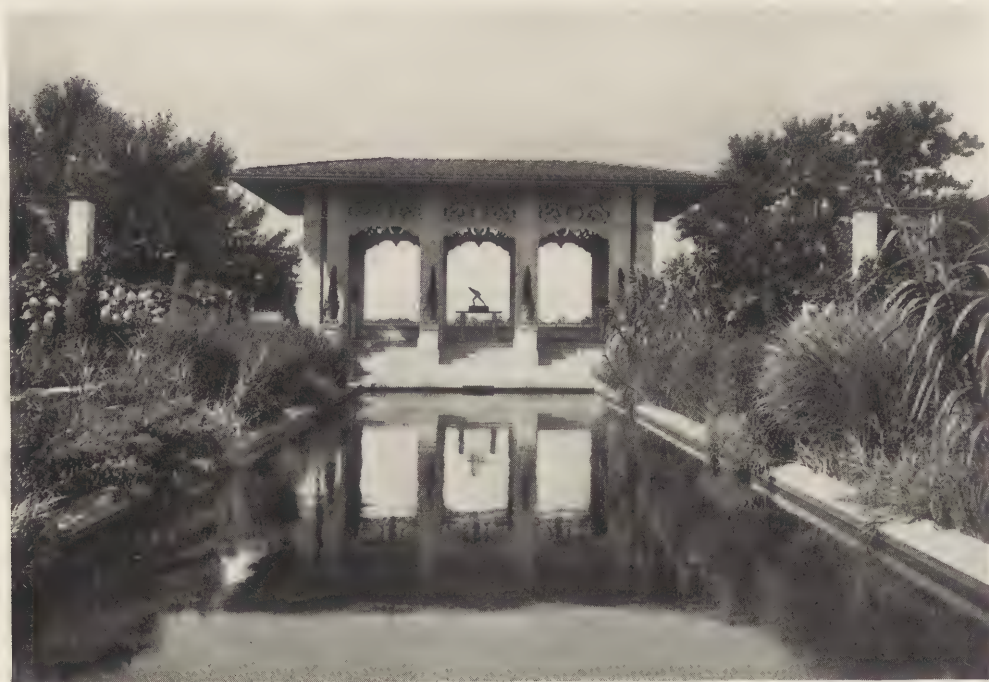


FIG. 15. CASINO AT WEST END OF WATER GARDEN—MELODY FARM, LAKE FOREST, ILL.



FIG. 13. WATER GARDEN, FROM THE WEST
TERRACE—MELODY FARM, LAKE FOREST, ILL.



FIG. 17. WEST FRONT, FROM THE CASINO ACROSS THE WATER GARDEN—MELODY FARM, LAKE FOREST, ILL.



FIG. 16. LOOKING TOWARDS THE HOUSE FROM THE CASINO—MELODY FARM, LAKE FOREST, ILL.



FIG. 18. DINING ROOM LOGGIA TO THE LEFT, FACING THE WINTER GARDEN. A SIMILAR FEATURE IS CONNECTED WITH THE LIVING ROOM ON THE OPPOSITE SIDE OF THE TERRACE—MELODY FARM, LAKE FOREST, ILL.

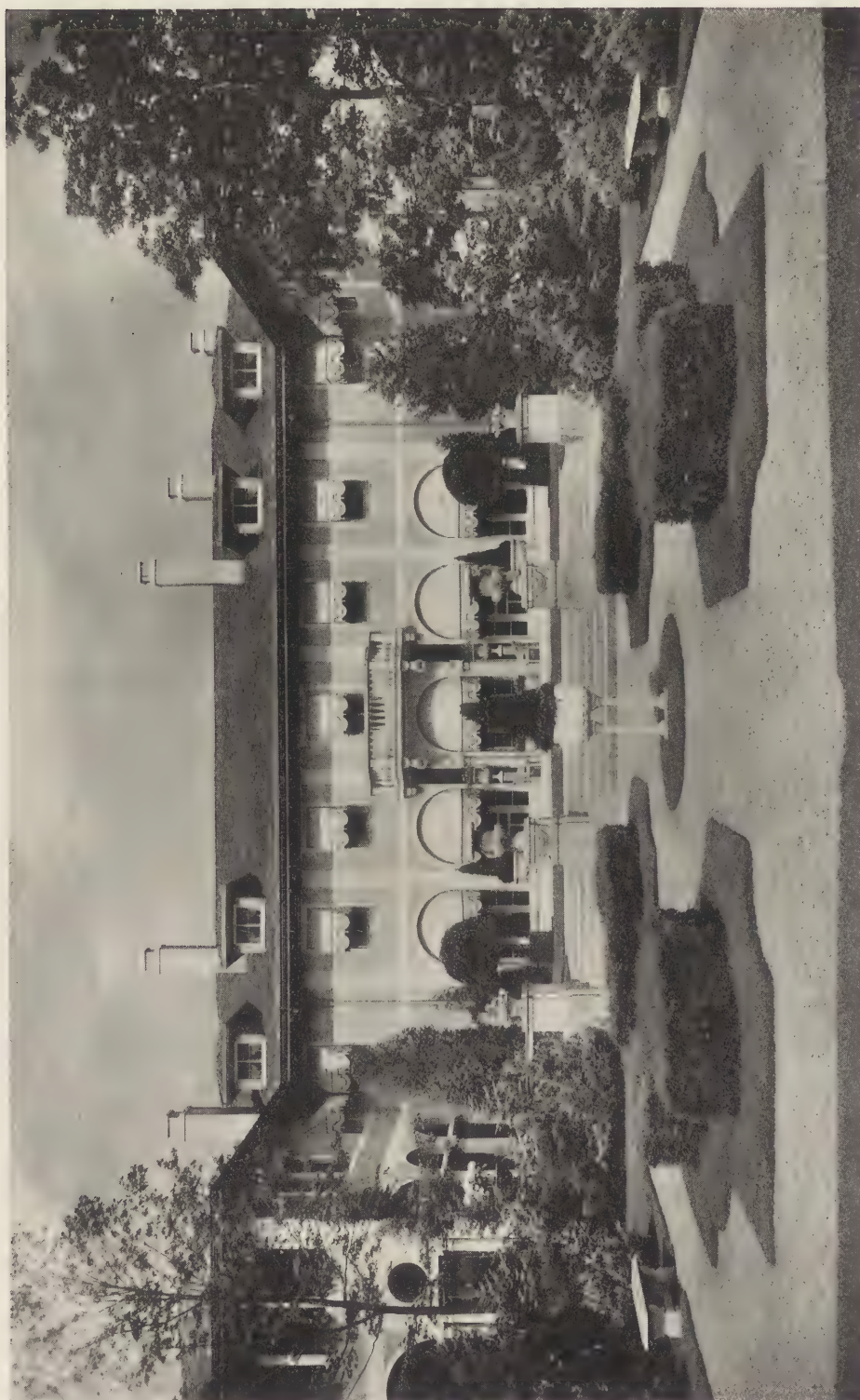


FIG. 19. WEST TERRACE AND FRONT. ON THE LEFT IS THE LOGGIA CONNECTED WITH THE DINING ROOM—MELODY FARM, LAKE FOREST, ILL.



FIG. 20. WEST FRONT BETWEEN THE LOG-GIAS-MELODY FARM, LAKE FOREST, ILL.



FIG. 22. APPROACHING THE ROSE GARDEN FROM THE NORTH—MELODY FARM, LAKE FOREST, ILL.



FIG. 23. ENTRANCE TO ROSE GARDEN. IN THE DISTANCE CAN BE SEEN THE PERGOLA AT THE NORTH END OF THE ORCHARD GARDEN AND, BEYOND, THE UPPER PORTION OF THE ORANGERY—MELODY FARM, LAKE FOREST, ILL.



FIG. 24. PERGOLA AT NORTH END OF ORCHARD GARDEN—MELODY FARM,
LAKE FOREST, ILL.,



FIG. 25. IN THE PERGOLA AT THE END OF THE ORCHARD GARDEN—MELODY FARM,
LAKE FOREST, ILL.,



FIG. 26. FOUNTAIN AND SEAT IN THE WATER GARDEN—MELODY FARM, LAKE FOREST, ILL.

where man's work is only that of an accomplice of Nature.

Passing out through the doors on the right, we find ourselves on the west terrace, which reveals to view in one long perspective all the beauties of the water garden, with the casino at the extreme end, shown in Fig. 13. This garden contains three pools, two nearest the house with a carpet of green lawn between them, and the third one beyond, seen in Fig. 14, with a terrace on each side of it leading up to the casino at the extreme end on a still higher terrace. Nature has done its best in four years to develop the beauties of this garden, but Art has crowned it at the end of the perspective with a casino of remarkable beauty, through which the unobstructed sky is seen. Here the architect has indulged his fancy uncontrolled by the practical conditions which prevail in house architecture. The casino is of stone and terra-cotta surmounted by a tiled roof with generous projections in the eaves (Fig. 15).

The pictures show nothing but sky beyond the casino, but the reader must

now be let into a secret which will be revealed in actuality near the end of this article. The view from the casino to the west is a surprise. It is across a beautiful artificial lake of about twenty acres, dotted by two islands, all the surroundings of which, having been recently planted, are still in the making.

We will now turn to the east and retrace our steps to the house. The first glimpse of its west side is seen in Fig. 16 at the right, showing also on the left the lattice work which covers the garden side of the pergola separating the orchard garden from the water garden.

Another view of the water garden and the west front of the house as seen from the casino is found in Fig. 17. Still approaching the house, we have a view across one of the pools of the west front which reveals the loggia in front of the dining room and the terrace in front of the winter garden, over which we have passed in entering the water garden. (Fig. 18). Another near view of the terrace and center of the west front is seen in Fig. 19. A still closer view of the central door from the winter garden giving upon

the terrace is shown in Fig. 20. Note the dark color on each side of the door deliberately placed there and the effect that it produces in its relation to the dark of the windows and the bay trees, and in contrast with the light gray of the awnings.

We have now re-entered the house and having passed northerly through the main hall to the foot of the marble stairs, and turning to the right, pass out through a branch hall and loggia to the portecochere, where we turn around and have the view through the arch looking back to the loggia which forms the east or main entrance (see frontispiece).

As a detailed plan of the house or main group of connected buildings is not shown, it may be of interest to give some of the dimensions which are not mentioned in the above description. The dining room is 38 feet 6 inches by 24 feet. The dining room loggia is 29 by 30 feet. The living room is 52 feet 6 inches by 24 feet, with an extension on the long side of 12 by 25 feet and a loggia 29 feet by 18 feet. The central hall is 112 by 20 feet with a corridor and loggia at the south end measuring 40 by 20 feet, the total length of hall

corridor and loggia over all being 152. There are three stairways in the main house, and in the kitchen extension one, also one in the laundry. There are four loggias on the first floor of the main house in addition to those already mentioned. The main house is planned in the shape of a letter H, and the outside dimensions both ways are 164 feet. The outside length of the kitchen extension is 114 feet and the width 48 feet. It is two stories high with a basement. The laundry is connected by a covered corridor, 89 feet long, with the kitchen and is 52 by 36 feet in ground dimensions. The extreme length of the main house, kitchen extension, corridor to laundry, and laundry is 419 feet.

Fig. 1a is a plan of the house and gardens. The water garden, west of the main house, has already been illustrated and described, and the special features illustrated in Figs. 21, 22, 23, 24, 25 and 26, and not described, can be located on this plan. The landscape treatment of about forty acres around the house and the remaining gardens will be the subject of further illustrations and comment at a future time.



FIG. 27. LOOKING ACROSS THE LAKE TOWARDS THE HOUSE AND GARDEN FROM THE WEST. CASINO SEEN AT LEFT OF CENTER—MELODY FARM, LAKE FOREST, ILL.



PENN MUTUAL BUILDING AND CURTIS BUILDING, PHILA-
DELPHIA. SEEN FROM WASHINGTON SQUARE, LOOKING
TOWARDS THE STATE HOUSE. EDGAR V. SEELER, ARCHITECT.



WEST SIDE—PENN MUTUAL BUILDING, PHILADELPHIA. SEEN FROM WASHINGTON SQUARE.
Edgar V. Seeler, Architect.

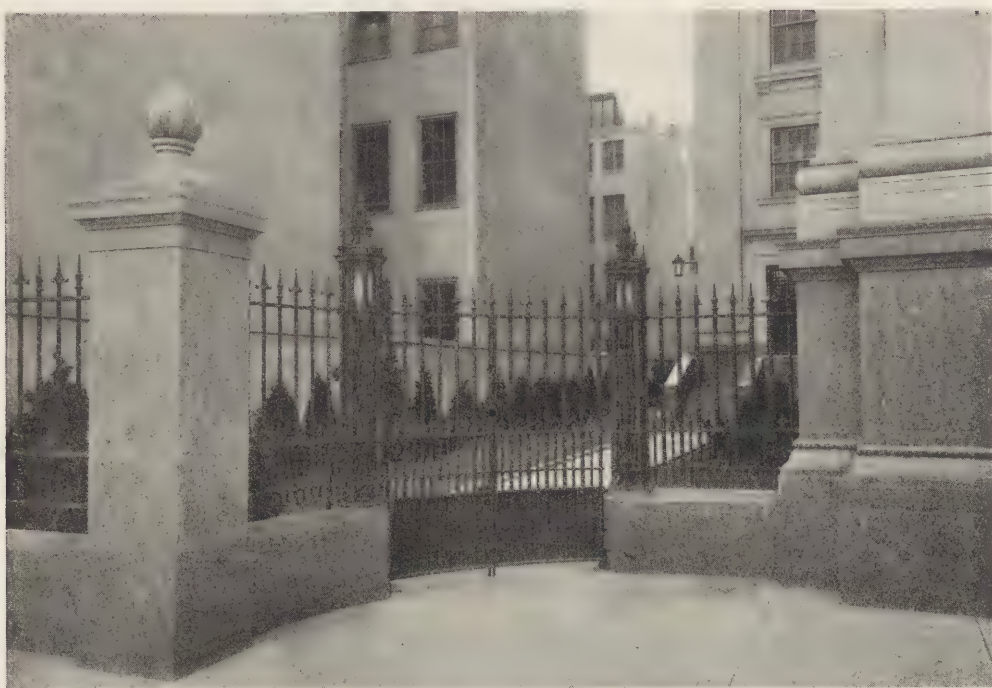
The Penn Mutual Building, Philadelphia
Edgar V Seeler, ~ Architect

By Harold D. Eberlein

THE Penn Mutual Building, Philadelphia, facing on Independence and Washington Squares, claims attention both for its architectural merit and as a structure whose physical qualifications are peculiarly well adapted to meet all the manifold requirements of the home office of a great life insurance company. When the Penn Mutual Life Insurance Company found it necessary to move into new and larger quarters, it was determined to build with an eye not only to present needs of accommodation, but also to providing for growth of business in years to come. The site chosen, at the southeast corner of Sixth and Walnut Streets, with a front of 123 feet on Independence Square and 216 feet on Washington Square, afforded area suf-

ficient to erect upon it a structure of the necessary size. The open location, where an excellent and unobstructed view could be had from several directions, invited a design that should both commend itself to casual inspection and, likewise, present conservative features of enduring interest suitable to a fabric occupying so conspicuous a position before the eyes of thousands daily passing by. The historic and architectural traditions of the immediate neighborhood, furthermore, prescribed to some extent the mode of expression to be followed in compliance with the civic desire to attain a seemingly degree of unity in the buildings surrounding the birthplace of our national existence.

A clear understanding of the building and its points of merit will best be gained



GATE AND FENCE DETAIL—PENN MUTUAL BUILDING, PHILADELPHIA.
Edgar V. Seeler, Architect.

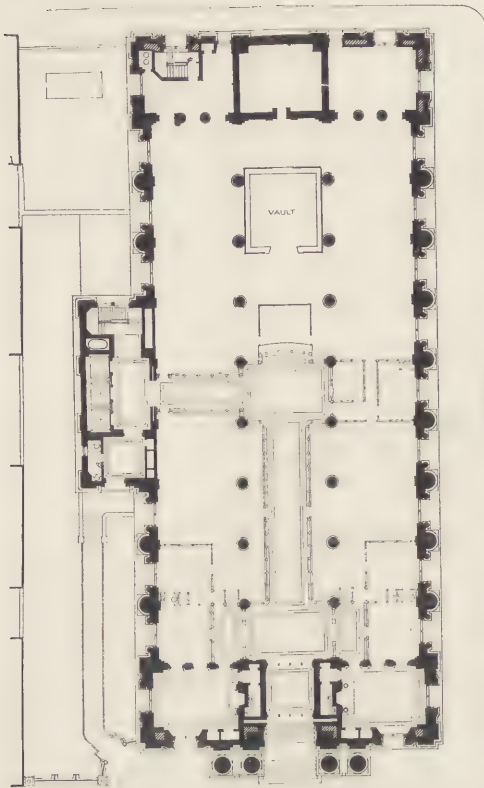
by first of all surveying its physical conditions. Besides incorporating in the structure, in complete and most modern form, every feature and working accessory incident to thorough equipment for convenience, efficiency and comfort, a well considered plan has reserved enough ground for the creation of a garden and a generous light and air space between the building and the other structures eastward in the block facing on Walnut Street. In its basement and nine floors the new home of the Penn Mutual Life Insurance Company contains, besides the regular business office, officers' rooms, actuaries' offices, medical examiners' offices, board rooms, safe deposit vaults, agents' offices and consulting rooms and accommodations for the clerical force, a fire-proof record room, a kitchen completely equipped with every efficiency device, dining rooms for the officers and for the employees, sleeping quarters and baths for the servants living in the building, a suite of apartments for the superintendent and his family, a rest room for the women employees, a recreation and

smoking room for the clerks and, finally, refrigerating, electric, heating, ventilating and power plants.

The employees' entrance, the lifts and the stairway are in a convenience tower on the east side of the building so that none of the rectangular area of the main portion of the structure is encroached upon for internal traffic purposes. The top of this granite tower, carried out in the same material and style as the rest of the fabric, encloses the water tanks that usually make an unsightly blot against the sky line of large city buildings devoted to office or manufacturing purposes. It also contains the clerks' recreation room in the form of a polygonal deck house opening out upon the flat roof of the main structure, which is covered with tiles laid in mastic and surrounded by a high and substantial granite parapet so that it becomes an auxiliary recreation space during the luncheon hour. The boilers, engines and pumps are partly in the basement of the tower, but chiefly under the back part of the air and light area at the end of the garden farthest from the



DOORWAY ON WALNUT STREET—
PENN MUTUAL BUILDING, PHILADEL-
PHIA. EDGAR V. SEELER, ARCHITECT.



GROUND FLOOR PLAN—PENN MUTUAL
BUILDING, PHILADELPHIA.
Edgar V. Seeler, Architect.

street so that the throb and vibration of the machinery are not perceptible in the body of the building, even on the ground floor. So much for the purely physical considerations to be noted.

Regarded from an architectural point of view, the cardinal traits of the Penn Mutual Building are dignity, conservatism and well-bred unobtrusiveness. Allusion has already been made to the fact that the historic and architectural traditions of the vicinity of the State House presupposed a treatment that should exhibit the characteristics of classic design either as interpreted through Georgian media or by a more direct return to ancient models. When the building of the Curtis Publishing Company, of which Mr. Seeler was also the architect, was erected several years ago, with a long frontage on Independence Square, conformity to the long-established architectural tone of the neighborhood was main-

tained by adopting a mode of expression obviously of Georgian provenance. At the same time, a note of blithesomeness was incorporated, consonant with the many-sided enterprise to which the structure is devoted. In the case of the Penn Mutual Building the nature of the business for which it was designed demanded a more serious and reserved form of expression. Viewed from Washington Square, the southeast corner of the Curtis Building and the northwest corner of the Penn Mutual Building form the sides of a frame bounding a vista of Independence Square and the State House with its strongly emphasized architectural character. The two great buildings, brought thus close together with only a narrow space separating them, afford interesting points of contrast and comparison. Both occupy an unusual frontage and both proclaim a classic source of inspiration. But the Curtis Building's immediate ancestor was Georgian and thus there was room for considerable play of flexibility in treatment. The Penn Mutual Building, on the other hand, while plainly displaying the traces of a general family resemblance, shows a close adherence to more ancient Roman precedents and thus gains materially in austere dignity, which is exactly what it was intended it should do.

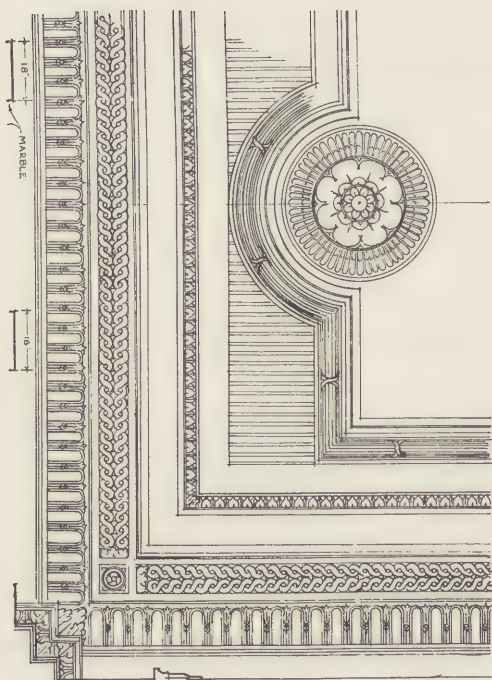
The close adherence to classic precedents in the design of the building may have stamped it with the ineradicable impress of conservatism, but it has not entrapped the architect in any of the pitfalls of perfunctory execution. In the first place, the adoption of the three superimposed orders, with the strongly accentuated horizontal lines of their entablatures, as an expedient to keep down the apparent height of a structure, where it was desirable that the aspect of height should be minimized, and to give interest to the whole wall surface of an exceptionally long frontage unbroken except by window openings, a wall surface that must otherwise have appeared bald and barracks-like, shows a ready command of the principles of sound composition and a nice perception of fitness in their application to meet peculiar local requirements. There is a conservatism of resourceful-



GARDEN SIDE—PENN MUTUAL BUILDING, PHILADELPHIA.
Edgar V. Seeler, Architect.



DOOR DETAIL—PENN MUTUAL BUILDING, PHILADELPHIA.
Edgar V. Seeler, Architect.



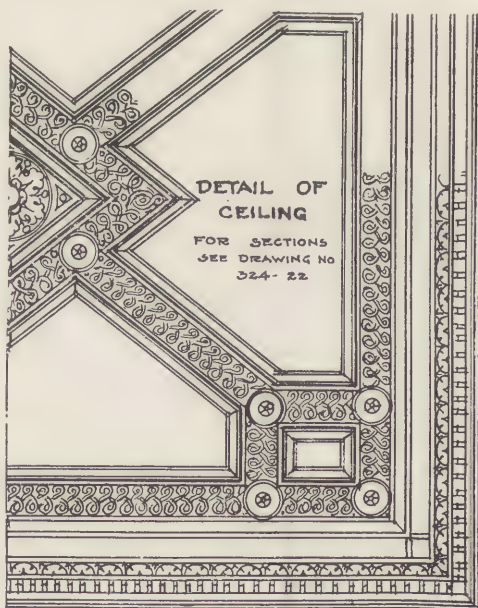
CEILING DETAIL—PENN MUTUAL BUILDING,
PHILADELPHIA.

Edgar V. Seeler, Architect.

ness and mastery of the situation and there is also a conservatism of banality that bespeaks ineptitude and a jejune imagination. The latter is usually either the concomitant or the cause of perfunctory achievement. Of the two sorts of conservatism, one may unhesitatingly say that the second is not discernible in the structure under present consideration. There is, perhaps, no quality of architectural execution more difficult of successful attainment than a legitimate conservatism which steers a safe course between the Scylla of forced originality and the Charybdis of perfunctory dullness and incapacity, both equally perilous. At any rate, it is thoroughly refreshing to find an example of deliberate conservatism and restraint such as may be seen in the Penn Mutual Building, and especially so when one has not far to seek to discover not a few instances in which, apparently, the feverish desire to be impressively original and the hectic striving, conscious or unconscious, after novelty have betrayed many architects—and men of unquestioned ability they are, too—into piti-

able exhibitions of bizarre faddishness or grotesque inconsistency. In any critical estimate of the worth of the Penn Mutual Building, particularly with reference to the item of originality of treatment, it must also be borne in mind that civic good taste and respect for historic conditions demanded that it be designed not merely as an wholly independent structure, but with reference to the type of other buildings near by in order to preserve due harmony in the Independence Square group.

The consistently maintained quality of unobtrusive simplicity verging upon austerity, both outside and in, has not prevented an appropriate display of concentrated enrichment in legitimate places. The detail of ornamentation is as chaste and as carefully proportioned as are the mass and the various structural features of the building. In this connection it is of interest to note the method employed prior to and during the course of erection to ensure satisfactory results. A full sized model in wood and plaster of a section of the whole lower stage of the structure was put up and from this were made a minute study and revision of pro-



CEILING DETAIL—PENN MUTUAL BUILDING,
PHILADELPHIA.

Edgar V. Seeler, Architect.



CORRIDOR TO TOWER AND LIFTS—PENN MUTUAL BUILDING,
PHILADELPHIA.
Edgar V. Seeler, Architect.



BY MAIN DOORWAY—PENN MUTUAL BUILDING,
PHILADELPHIA.
Edgar V. Seeler, Architect.



WOMEN'S REST ROOM—PENN MUTUAL BUILDING, PHILADELPHIA.
Edgar V. Seeler, Architect.



SECOND OFFICERS' DINING ROOM—PENN MUTUAL BUILDING, PHILADELPHIA.
Edgar V. Seeler, Architect.



FIRST OFFICERS' DINING ROOM—PENN MUTUAL BUILDING, PHILADELPHIA.
Edgar V. Seeler, Architect.

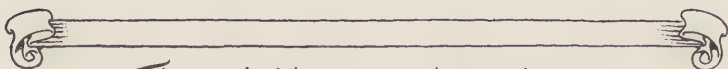
portions. Sections of other external features and details were subjected to a like critical scrutiny and justification of line. Before the interior plasterwork was put in place or the marble carved, full-sized detail casts of cornice sections, ceiling enrichment, door trims and minor details of decoration were set up in place and carefully rectified for apparent proportions, contour and requisite depth of cutting. The process was costly and troublesome, but the result has fully justified all the labor and expense involved. There are no crudities, no contours, no proportions, miscalculated for their visual effect, to cause regret. Structural parts and decorative detail are blended into one balanced and complete whole and so modestly does the ornamentation, however rich, stay in its place that it needs more than the casual glance to be aware of its merit or even of its presence. When examined, however, it will stand the test of close inspection and repay the effort by the interesting variety disclosed. In the bronze doors, for instance, there is no perfunctory repetition of rosettes, but all

are of different pattern from those in their immediate neighborhood. Some notion of the variety of ceiling treatment may be gained from the accompanying section details.

Another point that makes for satisfaction is the honesty of the materials used in construction. Whether it be the grey granite of the exterior, the Tavernelle marble of the interior, the bronze or the oak woodwork, one is conscious that it is all genuine and sound and there is not the distressing sense of spacious substitutions that, sooner or later, are bound to come to light and disappointingly destroy even the flavor of honesty. The one feature of finish and equipment open to serious criticism is the use of mahogany woodwork in several of the officers' rooms and in the board room and the retention of the mahogany furniture used in the board room of the former building, furniture as ugly as it doubtless was expensive. It is unfortunate that an antiquated obsession that mahogany is the only proper wood for fine work should have marred an otherwise excellent interior.



FRONT ELEVATION—ALBANY (N. Y.) ACADEMY.



The Albany Academy

By C. B. Cutler

*With Measured Drawings by J. L. Dykeman
and F. J. Ricker Photos by E. V. Rockwood*

PART I.

IN 1812, through the persistent efforts of Phillip S. Van Rensselaer, then Mayor of Albany, the Common Council appointed a committee to report on the "expediency of establishing a city academy and endowing the same."

As a result of this beginning the Regents, "conceiving the said academy calculated for the promotion of literature," duly granted a charter to "the Trustees of the Albany Academy," March 4, 1813. This charter is still in effect and the institution, as well as its house, stands a monument to the foresight and liberality of its founders. Its high standards are maintained to-day and its classical course was unequalled save by Yale until within a few decades.

Within its walls Joseph Henry spent his early student days and later, as an instructor, gave to the world his discovery of the principle of electro-magnetism, upon which is based every useful application of electro-mechanics, from Morse's telegraph to the mighty dynamos at Niagara.

So much of its history one must know to understand the remarkable care and expenditure bestowed on its housing.

Phillip Hooker was its architect beyond a doubt, though tradition has credited the work to Thomas C. Taylor and also has it that on the copper plate placed in the corner stone in 1815, was engraved, "Seth Geer, Architect, H. W. Snyder, Sculptor."

Hooker's name appears on a slab over the center window of the upper story in the rear wall, and the characteristics exhibited in his many other buildings are so prominent in this, that there is no reason to dispute his claim.

The building is noteworthy for the skillful handling of its mass, the breadth and liberality of its plan and the variety of the interior detail, which still retains unity in feeling.

A remarkable feature is to be seen in comparison of the front elevation with the photographs. In the sharp rise of the hip roof is ample evidence that the designer understood perspective and had calculated his elevation with reference to the site, which slopes rapidly away from the building on the east.

The high basement was originally buried almost to the first floor level and it was not until 1821, when 10,000 loads of earth were removed in grading, that the complete design was disclosed to view from the noble park that lies to the east and forms a beautiful setting.

Nyack red sandstone is the material, and it narrowly escaped being discarded for brick, in the rear. It was finally determined, however, to use the better material throughout.

For timber, white oak, every stick hand hewn, was thought none too good and white pine forms the interior trim.

There is no composition ornament, by the way, every leaf and volute being carved in the solid, as every moulding was run with the hand plane.

The stair treads are of white oak and have never been renewed; next to the mahogany rails they are worn into deep hollows.

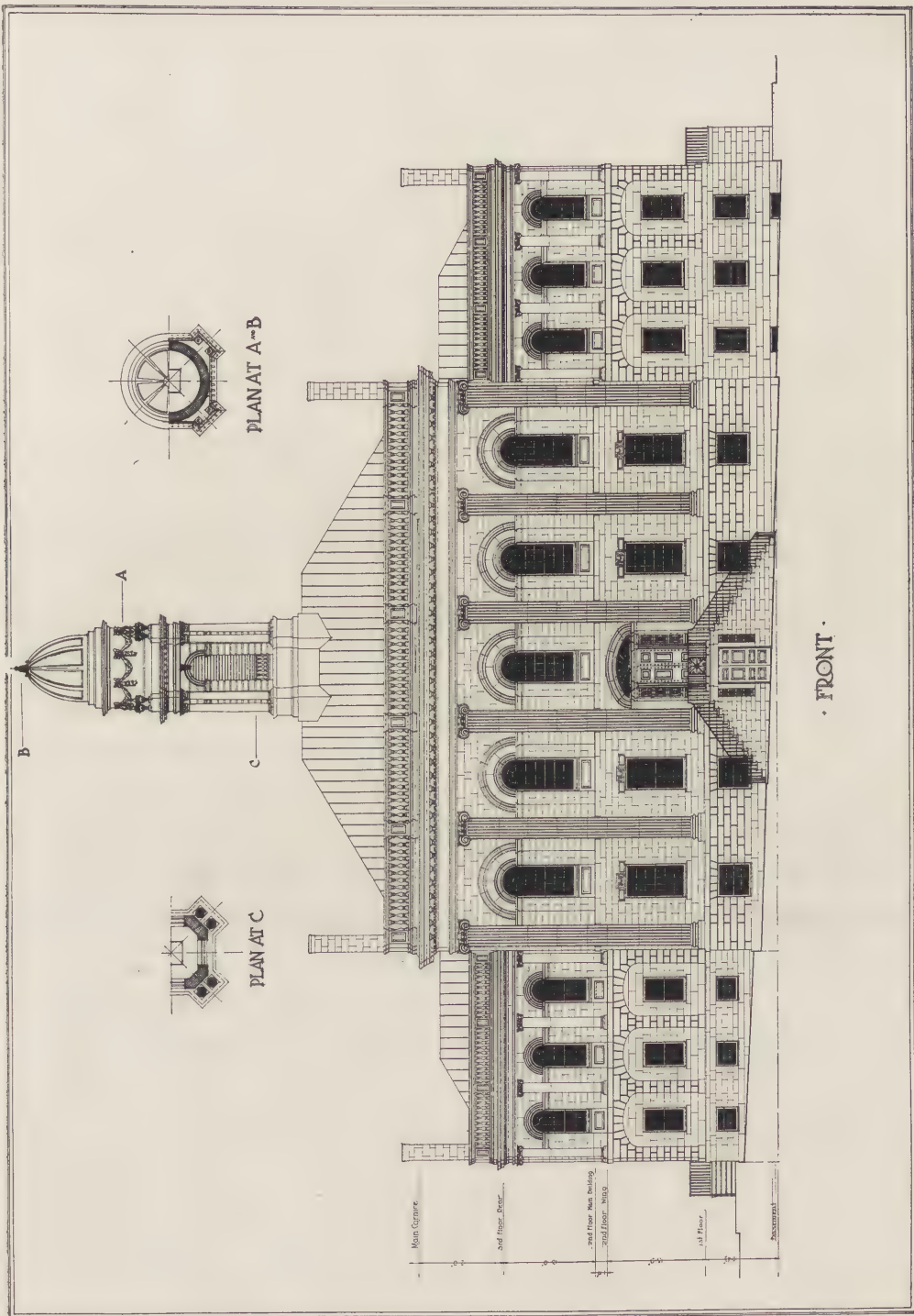
Heating and ventilation were intended to be combined, as is shown in the air flues carefully cut through the stone of the outer walls slightly below the fireplace hearths. Their position indicates connection with an air jacketed stove, in severe weather, of a type shown in contemporary publications.

Fresh air was fed to the annular space between stove and jacket and discharged warm through an upper opening.

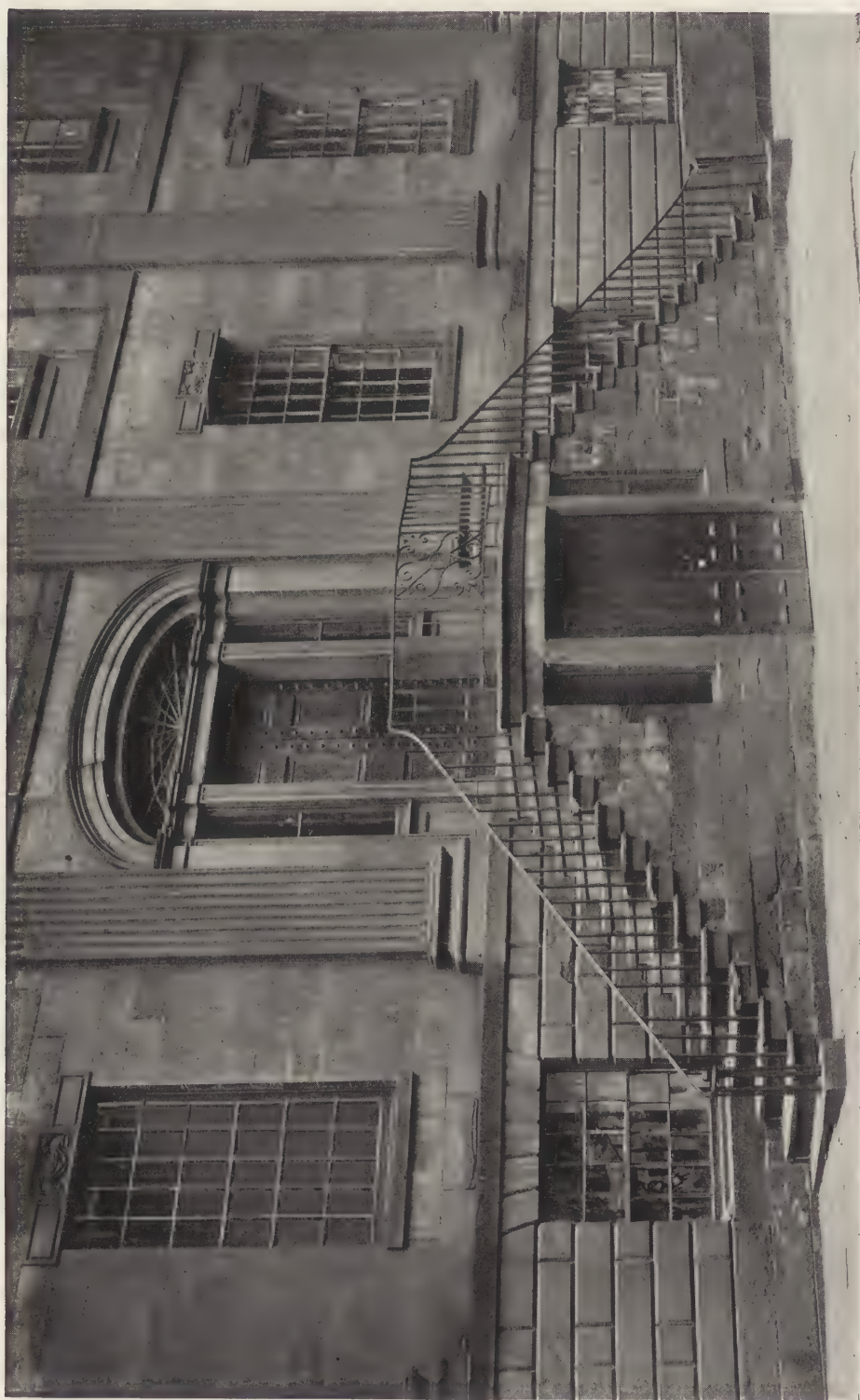
No less remarkable than its beauty is the condition of this century old building to-day. It has escaped any mutilation, has not been altered in any essential way



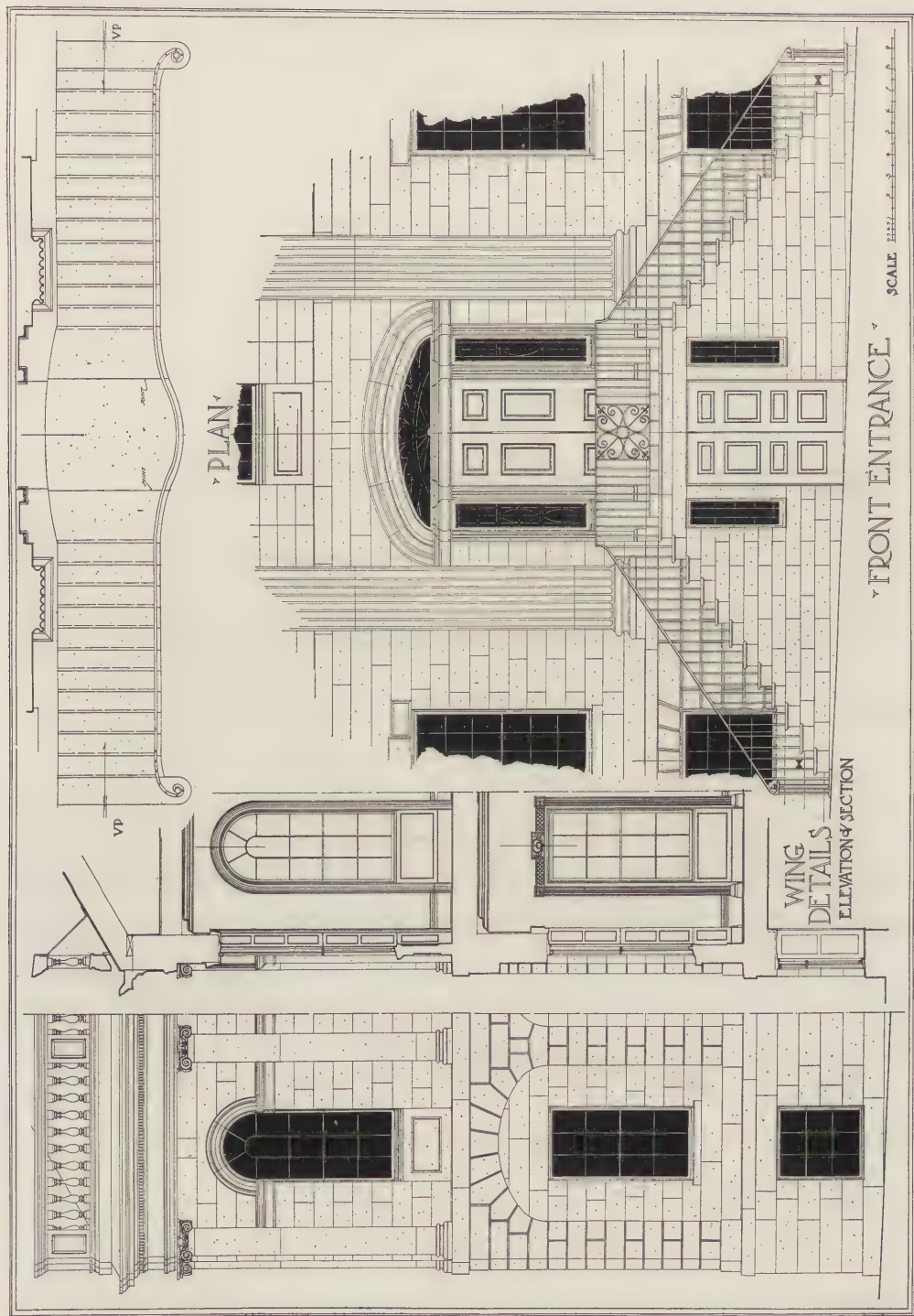
ALBANY (N. Y.) ACADEMY.



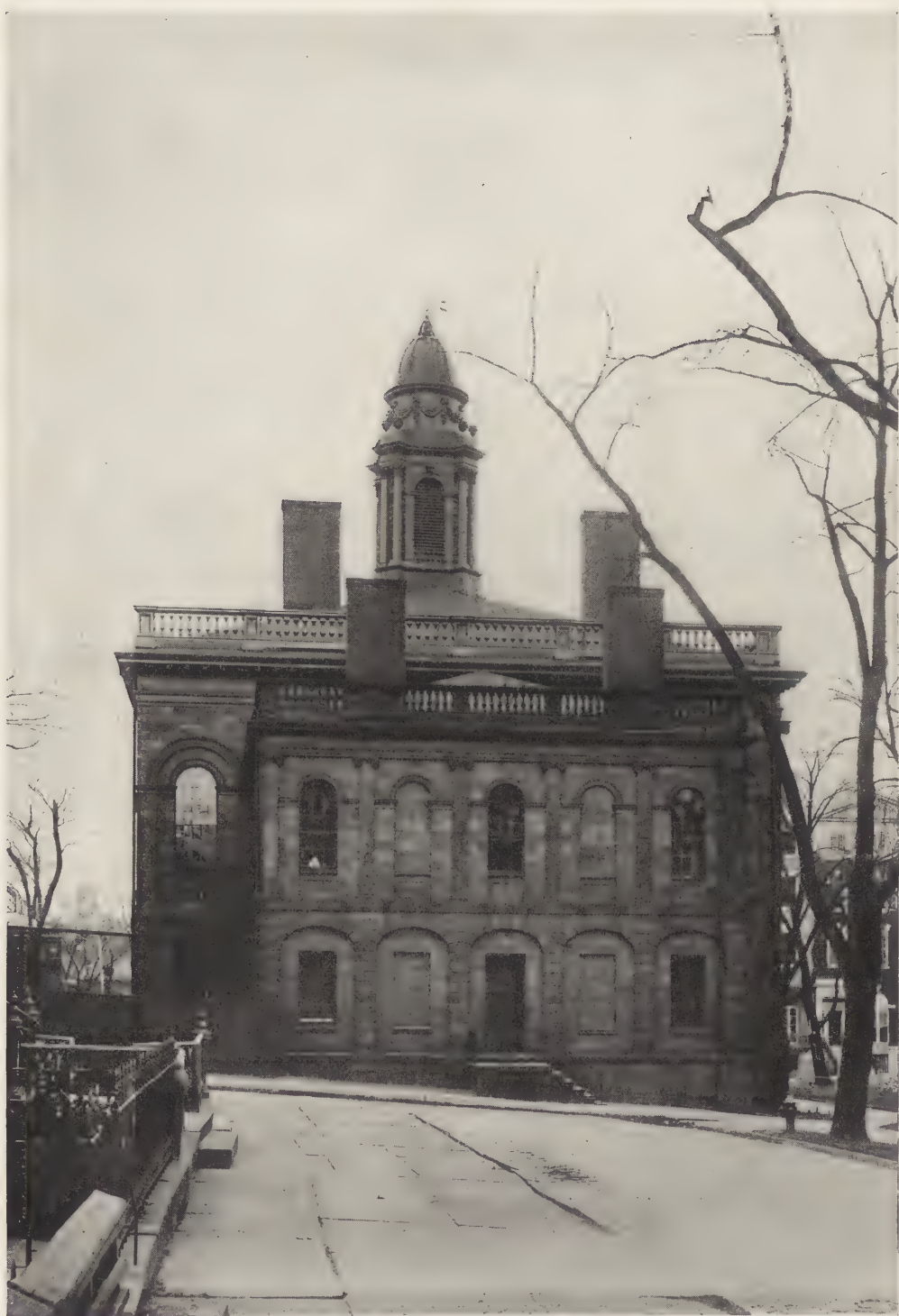
ALBANY (N. Y.) ACADEMY.



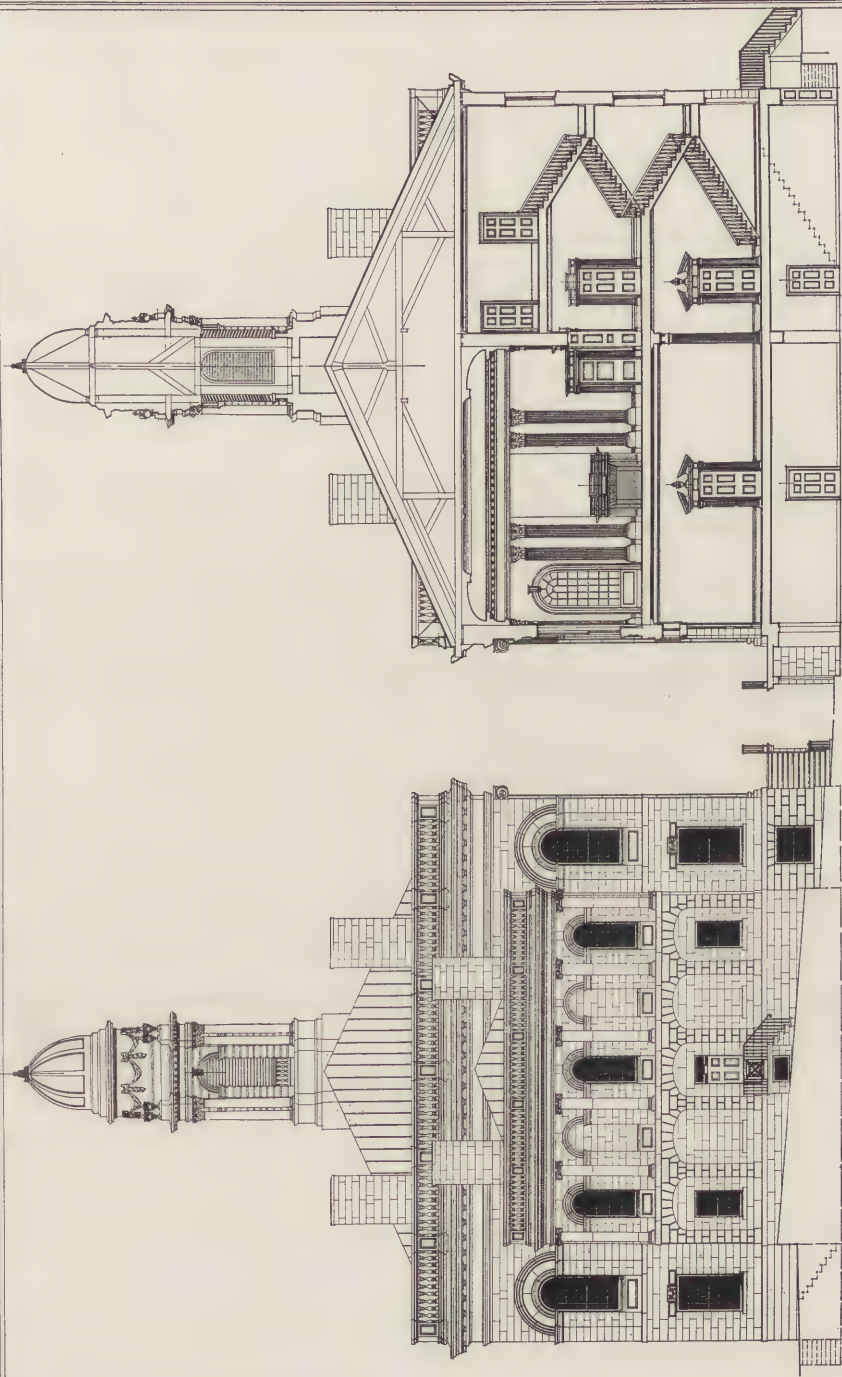
DETAIL OF FRONT ENTRANCE.
ALBANY (N. Y.) ACADEMY.



ALBANY (N. Y.) ACADEMY.



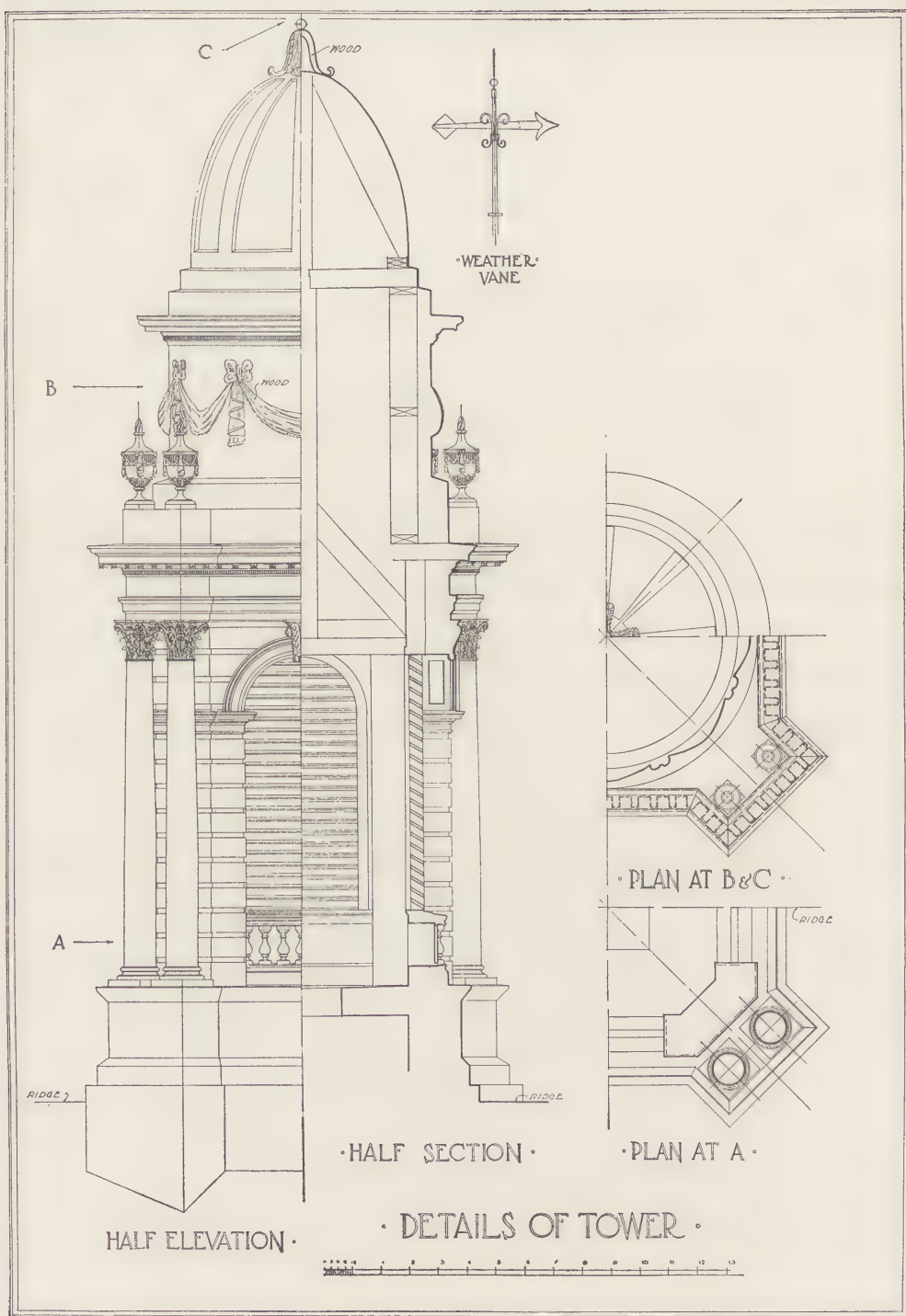
END, OR LAFAYETTE STREET, ELE-
VATION—ALBANY (N. Y.) ACADEMY.



· END ·
LAFAYETTE ST.

· CROSS SECTION

ALBANY (N. Y.) ACADEMY.



ALBANY (N. Y.) ACADEMY.

and is one of the most perfect specimens of its type in existence.

Of all the wealth of architectural landmarks that the old city of Albany once possessed, the Academy stands alone, if we except the Schuyler Mansion, 1752, now being restored by the State, the "North Dutch" Church, which has been so altered as to have little of interest left, and the Second Presbyterian Church.

Philip Hooker has to his credit: the old State Capitol, 1820; the old City Hall, 1829; the State Bank, 1802; the Second

Presbyterian Church; the old Fourth Presbyterian and the Second St. Peter's churches; and the three Dutch Reformed churches, known locally as the North Dutch, the South Dutch, and the Middle Dutch. The last mentioned was an especially beautiful example of the early nineteenth century classic work. Of them all the North Dutch, the Presbyterian Church and the State Bank remain, with the Academy, as evidence of a skill and refinement, notable in that day and none too frequent in our own.



DETAIL OF TOWER—ALBANY (N. Y.) ACADEMY.



DOORWAY—THE BARRETT APARTMENTS, CHICAGO.
RICHARD E. SCHMIDT, GARDEN & MARTIN, ARCHITECTS.



The Barrett Apartment House, Chicago

Richard E. Schmidt, Garden & Martin, Architects

By W.^m D. Foster

WHILE there is no inherent reason why an apartment should not have the charm of a home, the fact remains that many are quite devoid of any domesticity or individuality. An apartment can be given an individual touch, both in planning and in decoration and furnishing, which will relieve it of the monotony of a repeating motive. A place can be created where one can go with quite the sensation of possession and intimacy which is so much an essential human instinct.

It is just this point which has become a distinguishing feature of the work of the firm of Richard E. Schmidt, Garden and Martin, as expressed in the apartment houses which they have designed in Chicago. It is a result not of accident but of very conscious effort on the part of the architects, who believe that it is the only way to rescue this branch of architecture from the slough of impersonal building in which it was born and which it has never been able to leave completely.

The domestic quality of these buildings has been aided by the fact that the apartment house has developed along a somewhat different line in Chicago from that followed in the East. By reason of the fact that the better residential districts are not yet so congested, the land values are lower and the apartment houses have therefore been made to spread over a considerable ground area rather than to rise to any great height. To be sure, there are some few buildings along the Lake Shore Drive which are very similar to the New York type, but they are conspicuous because of their isolation. Another factor which has made for this limitation of height to three stories or three stories and an English basement is the fact that any greater height means a greater proportionate investment in order to meet the requirements of the law concerning fire-escapes and fire protection. Any building

over three stories must be made fire-proof. It is obvious that in a low building a more domestic character can be obtained than in a high building. Verticality has never been able to give the repose and calm restfulness that result from horizontality.

The apartment work of Richard E. Schmidt, Garden and Martin, of which we illustrate the latest, well shows that these architects have not only escaped the errors in taste of the ordinary apartment house design, but have achieved actual architectural merit and style.

The earlier buildings—the Chandler, the Hardy, the Chase, and the Craig, all in Chicago—have a general atmosphere which shows an adaptation of English motives; in the Barrett we find a very distinct Italian feeling.

Perhaps the most successful from the point of view of exterior design are the Chase and the Craig, each of which has a most delightful spirit and recalls distinctly the brick and stone work of the Renaissance in England. But while this spirit of the English Renaissance is very evident there is no copying and, in fact, hardly an adaptation of any particular motives. The designs simply have that air which can only result when with a true knowledge of precedent there is combined an artistic insight that makes mere copyism impossible.

The Chandler was the first to be built and is particularly interesting because of the development of an interior court. Here a fountain with grass plots and shrubbery—and a terrace beneath which are the garages—gives a touch of domesticity not to be found everywhere and of particular value in affording a pleasant outlook for many of the rooms.

Second in the group came the Hardy. This building follows more closely the influence of the Jacobean precedent. It too has a very interesting plan in that the light courts which become necessary



THE BARRETT APARTMENTS, CHICAGO. RICHARD
E. SCHMIDT, GARDEN & MARTIN, ARCHITECTS.

when one has a large place to deal with have here been so arranged that they light only the unimportant service rooms. The other rooms look onto larger areas, as the fine forecourt.

The largest of the buildings and, in many ways, the most interesting is the Chase apartment. It is, moreover, the least expensive of the group and shows well the fact (which many might realize more fully) that it is not the money, but the study that goes into a building, which makes it a work of architectural beauty. Of the simplest material and construction, this building has a charm of proportion, a delicacy in detail, and a restraint in ornamentation which makes it a distinct achievement in this type of problem.

The plan also is noteworthy. In fact, the whole solution was considered so unusually good that the Illinois Chapter of the American Institute last year (1915) awarded to the architects its annual gold medal for the most noteworthy architectural performance.

Again, the Craig apartment is interesting particularly in plan—in the use that has been made of a corner lot. In this case a large forecourt has been developed with the principal facade running at 45 degrees with either street. This has resulted in more of the principal rooms having a street outlook than would otherwise have been the case, and also in greatly enhancing the architectural effect of the corner.

In all of these buildings the English basement has been used as the most economical scheme and also because it gives a safe and comfortable elevation above the street level for the first renting floor.

The Barrett apartment is the latest of those built and has a rather different style from the earlier ones. Simple and restrained, the facade, with the stone cartouche at the first floor level, has an Italian feeling which is modified by fenestration of almost Colonial proportions. The scheme of treating the entrance motive united with the windows above and the whole balanced by a similar mass of stone on the other side of the axis is quite similar to the wood treatment of the entrance of the Craig apartments.

The vestibule and entrance hall on the basement floor are simply treated with plaster walls paneled with simple moldings and a black and white cement tile floor of considerable distinction. The spaciousness of this public part lends a certain dignity, while the placing of pieces of furniture in the hall and the fireplace give a truly personal air of comfort.

Each of the five floors is given to only one apartment. As one steps from the elevator into a small entry the feeling is as if one were in a home immediately, for even this part of the public hall has a piece of furniture, a chair or a table with a mirror or picture above it. From here one enters the reception foyer off of which open the living and dining rooms and a passage to the bedrooms. The plan has been so arranged that the greatest advantage possible has been taken of the southern exposure, three bedrooms and the sitting room with its eastern-exposed sun-porch all facing south. The living-room also has southern exposure, which leaves only the service on the north.

The interiors, although simple and restrained, are quite dignified. While the same general treatment has been followed throughout the building, there are many variations which were made according to the wishes of the individual tenants.

The planning of the fifth floor is quite different from that of the others, and with a small sixth floor forms a so-called duplex apartment. The space which in the other floors was given to servants' rooms here forms a most interesting "court," which has come to be the real center of the apartment. The "court" extends through the two stories and has a small balcony running across one end, a place for musicians when dances are given.

The floor is of black and white tiles and at the end opposite the balcony there is a fountain; the center of interest, however, is the large fireplace with its interesting mantel. These special features which were incorporated at the request of the prospective tenant create an individual effect that immediately removes the stigma of "apartment" and makes a home.

It surely is most gratifying to note the advance which these buildings mark in



ENTRANCE HALL—THE BARRETT APARTMENTS, CHICAGO,
RICHARD E. SCHMIDT, GARDEN & MARTIN, ARCHITECTS.



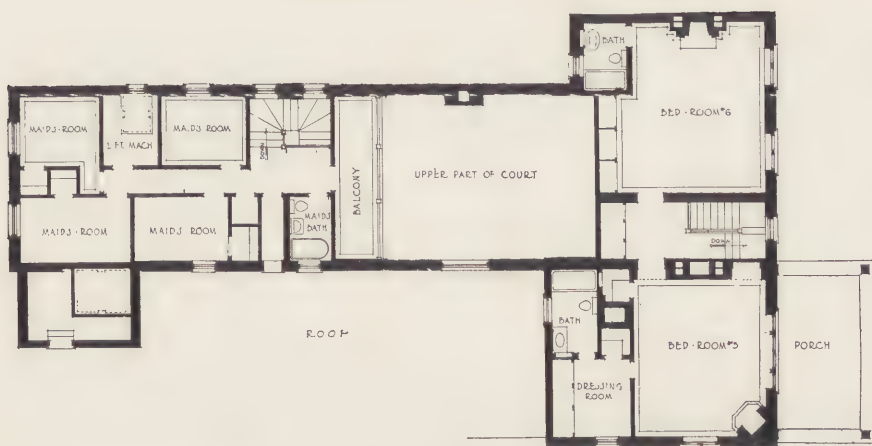
ENTRANCE HALL—THE BARRETT APARTMENTS, CHICAGO.
RICHARD E. SCHMIDT, GARDEN & MARTIN, ARCHITECTS.



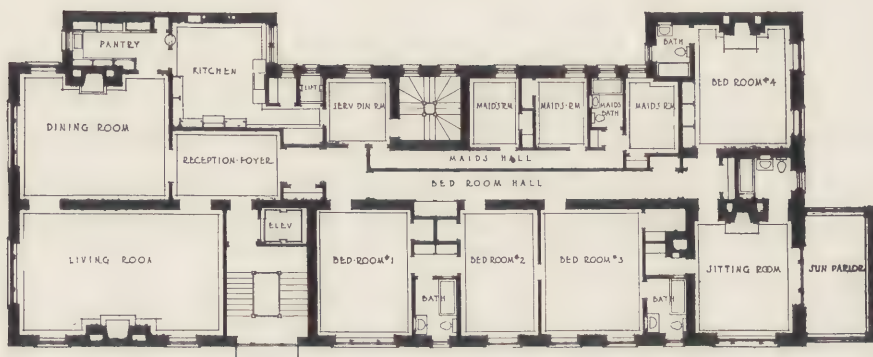
LIVING ROOM—THE BARRETT APARTMENTS, CHICAGO.
RICHARD E. SCHMIDT, GARDEN & MARTIN, ARCHITECTS.



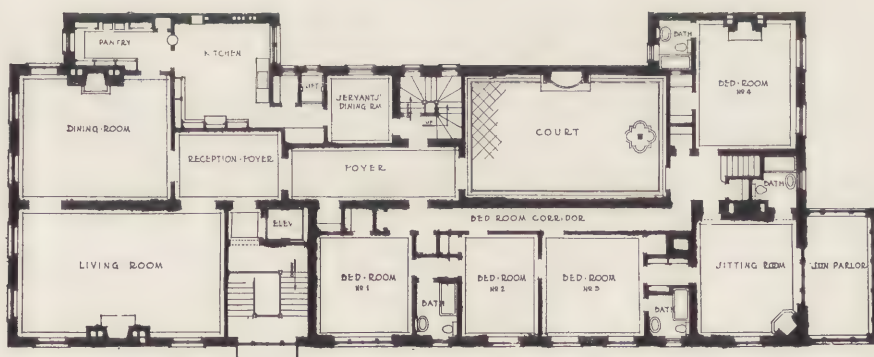
DINING ROOM—THE BARRETT APARTMENTS, CHICAGO.
RICHARD E. SCHMIDT, GARDEN & MARTIN, ARCHITECTS.



Fourth Floor.



Third Floor



Typical Floor.

FLOOR PLANS OF THE BARRETT APARTMENTS, CHICAGO.
 RICHARD E. SCHMIDT, GARDEN & MARTIN, ARCHITECTS.

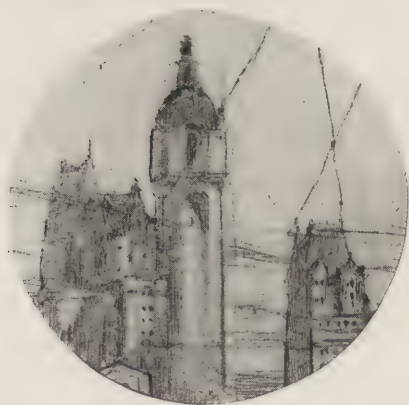
the design and construction of a problem which is to be met with increasing frequency. Inherently a problem that presents many difficulties—the arrangement of a plan that is generally hedged in by many restrictions, the designing of an elevation to appear domestic in spite of its repetition of equal elements on various floors and the handling of large surfaces—the solutions have only too frequently been unsatisfactory.

The efforts at first were so ruled by the desires of real estate investors, who were only interested in the amount of their investment and its effect upon an early purchaser, that little competent study was put upon the problem. But at a comparatively early date the public felt the inadequacy of these buildings that are homes to so many city dwellers and objections were heard on many sides to their poor construction, their poor planning and some even to their poor aes-

thetic appearance. Laws have been passed that have done something toward relieving conditions, at least toward the protection of life, in that cubical contents, light area and other such points have been fixed; but the aesthetic relief has been slower.

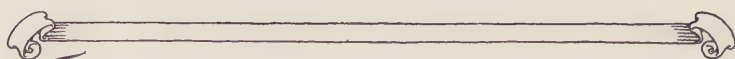
Of course, substantial advance did not come until architects of real ability worked upon the problem and achieved good results; the public, recognizing and appreciating the change, made the owners realize that greater investments would pay them well. It is now impossible at any time to make a survey of recent architecture without including many excellent apartment houses.

These by the firm of Richard E. Schmidt, Garden and Martin are representative of this striking advance and are particularly commendable because of the distinct note of domesticity which they possess.





COBB BUILDING, SEATTLE, WASH.
HOWELLS & STOKES, ARCHITECTS.



The Cobb Building, Seattle, Wash.

Howells & Stokes, Architects

By John J. Klaber

ONE who observes the tendencies of current architectural growth may readily note the great increase, in recent years, of office buildings for special purposes. We have printers', chemists', architects', and lawyers' buildings, to name only a few examples taken at random. In some cases the specialization is merely a convention adopted by the owners of the structure, in others it involves special planning and equipment.

The medical and dental office buildings may be included in the latter category. While their divergence from the general type of office building is not great, it is, nevertheless, sufficient to merit special notice.

Until very recent years the offices of doctors and dentists were invariably in their homes. But the growth of electrical and other technical apparatus, the increased difficulty of housekeeping under modern conditions, and the desire on the doctor's part to confine his activities to stated hours, instead of being called on at all hours of the day and night, have prompted the location of his office outside the home, thus following the example set by most of the other professions.

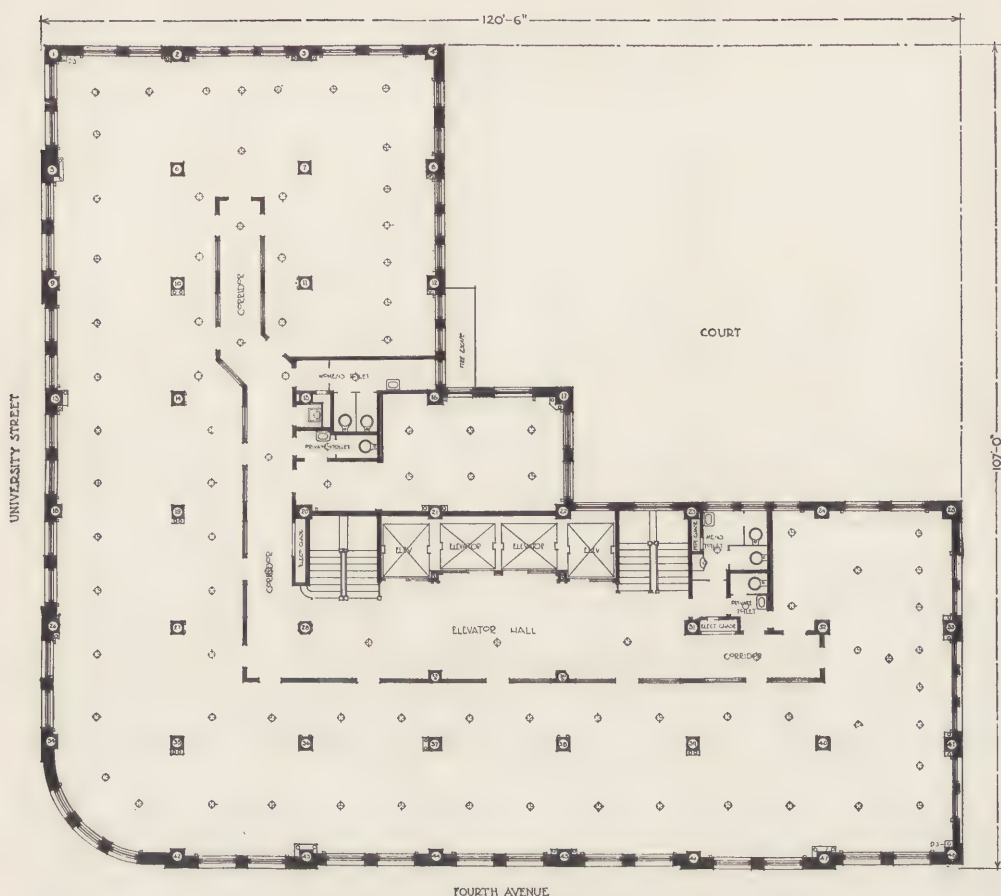
The segregation of this type of tenants in buildings exclusively for their use is also mainly a question of obtaining the necessary technical facilities. They require electrical and plumbing equipment in excess of that of the ordinary tenant, and naturally prefer those buildings in which these superior facilities are to be found. There are also other considerations, affecting more particularly the owner, and prompting him to cater to this specialized demand, since medical practitioners, although willing to pay a good rental, are difficult to satisfy, require an equipment and janitor service that would be unduly expensive for a general office building, and their presence tends to ren-

der the building less desirable for many other classes of tenants.

We find, therefore, a number of buildings, in various cities, whose construction and equipment has been specialized for the use of doctors, and whose tenancy is largely or wholly restricted to their use. Of these the Cobb Building in Seattle is probably the largest, and represents the highest type of development yet reached. It is of first class fireproof construction, and contains everything that may be useful for its purpose. It has, in consequence, been a great financial success, so much so that the owners are contemplating the erection of an annex to take care of the growing demand for offices.

The Cobb Building is one of the units of a group being gradually developed by a company owning a large tract in the center of the city of Seattle, formerly occupied by the State University, and now being developed with a variety of commercial buildings, including a theatre, a convention hall, and several office buildings. All these have been designed by Messrs. Howells and Stokes, in a simple dignified treatment of brick and terra-cotta, of which little need be said here, since these buildings, so far as their external features are concerned, have been already discussed in an article by Mr. Herbert Croly in the *Architectural Record* for July, 1912. We are, at present, more particularly concerned with the details of the internal arrangement, and its adaptation to its purpose.

The Cobb Building is ten full stories in height, plus a basement partly above grade and a roof house of considerable size, used for offices, and accessible by two of the four elevators. The ground occupied has a frontage of one hundred and twenty feet on Fourth Avenue, and one hundred and seven on University Street. On the side parallel to Fourth Avenue



TYPICAL FLOOR PLAN—COBB BUILDING, SEATTLE, WASH.
Howells & Stokes, Architects.

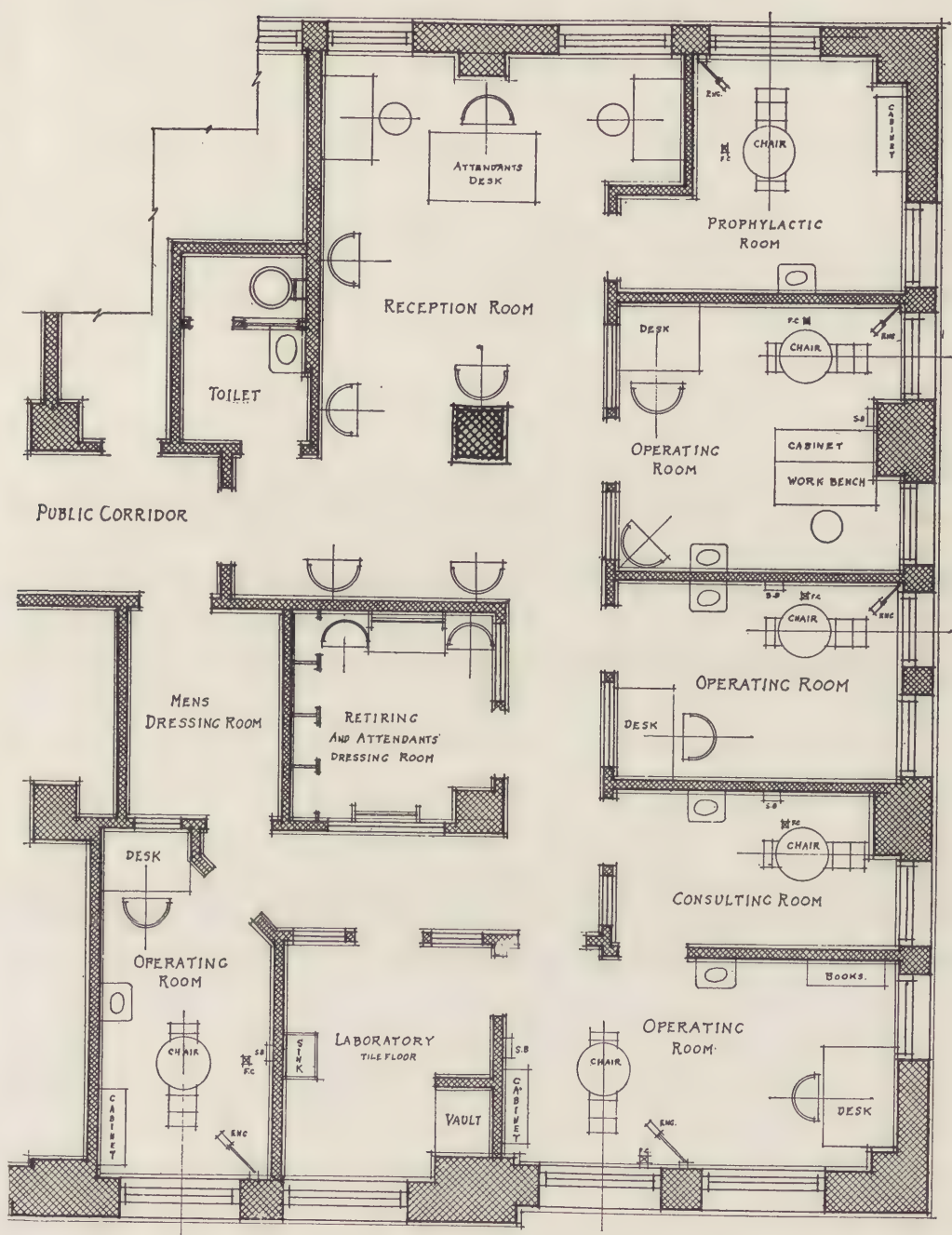
runs an alley about twenty feet wide, while the fourth side, facing approximately north, has its light protected in part by the new Federal Post Office, of only moderate height, a permanent north light being thus assured. The floors are spaced eleven feet apart, floor to floor, and the columns sixteen feet ten inches on the avenue and fourteen feet ten inches on the street, although this latter spacing has been found to give rooms that are a trifle small for their special use.

The general plan is substantially that of the typical modern office building, except as to a few features. There are, for example, toilets for both sexes on every floor, as well as two private toilets, intended to be rented in connection with the adjoining offices. This latter feature was not greatly appreciated at the time of its

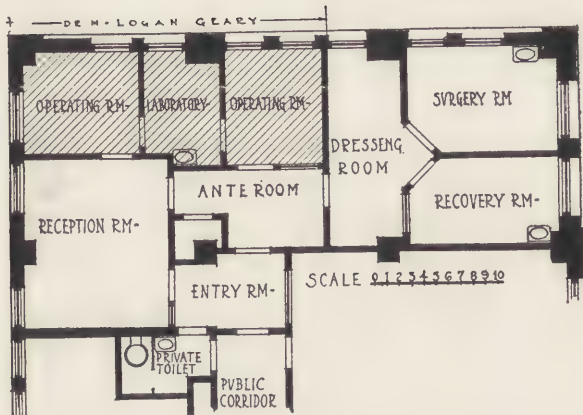
introduction, but is growing in popularity, and in the proposed annex it is likely that it will be still more extensively used. The architects of the building even favor the use of private toilets with each suite, public toilets being almost entirely eliminated.

In addition to these facilities, all the offices are provided with wash-basins, the pipes in some parts of the building being of a size that will allow extra toilets and bathtubs to be put in if desired, although as yet this has not been done.

Some other features of the general plan may be mentioned. The round corner has not proven particularly successful, making the offices more difficult to rent. The space back of the elevators, on the other hand, has rented readily, being of a good size and with excellent north



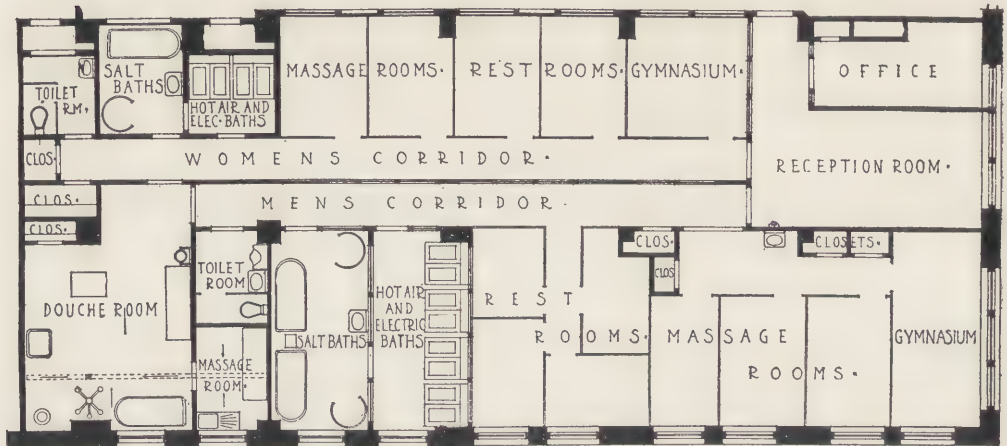
OFFICE OF DR. FRANK I. SHAW—
COBB BUILDING, SEATTLE, WASH.
HOWELLS & STOKES, ARCHITECTS.



OFFICE OF DR. H. LOGAN GEARY, WITH SURGICAL OPERATING ROOM.

and the additional expense has been made up by the increased rate of rental.

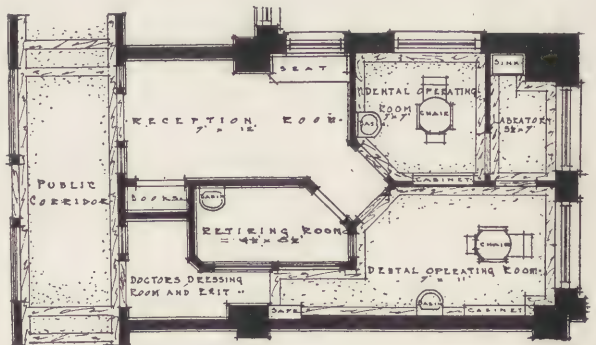
This increased rate, however, has not meant unduly high total rents, because of the economy of space afforded by the plan. The building, as constructed, has not been divided, but the offices have been installed as needed, so that each one is adapted to the individual tenant. Thus, although the expense of partitioning has been somewhat increased, this has been more than offset by the greater economy of space, with a gain both in renting value and in convenience to the user.



PLAN OF HYDROTHERAPEUTIC BATHS—COBB BUILDING, SEATTLE, WASH.
Howells / Stokes, Architects.

light. A special feature is the use of double walls between offices and toilet rooms, to render the former quieter and more desirable.

The equipment of the building is of course very complete, including gas, compressed air, vacuum cleaners, and both direct and alternating current. The elevators are very large and of rather slow speed, in view of the large number of women and children using the building. In all these matters special attention has been given to the needs of the occupant,



OFFICE OF DR. GEORGE T. WILLIAMS, IN THE ROOF HOUSE BACK OF THE ELEVATORS.



VIEW OF OPERATING ROOM—COBB BUILDING, SEATTLE, WASH.
Howells & Stokes, Architects.

The plans of office layouts reproduced herewith show a few of the possible arrangements. Dr. Williams' office, located in the roof house back of the elevators, may be taken as more or less typical of the smaller suites, except that it has the advantage of light on two sides. It contains a reception room, a retiring room for patients, two operating rooms, a small laboratory, and a special exit for the use of the doctor. With light on the end only, this arrangement would require to be modified by the reversal in plan of the laboratory and the smaller operating room, the reception room and laboratory being lighted only by artificial or borrowed light.

Dr. Shaw's office, located in the north end of the building, is a far more elaborate suite, having four operating rooms, with a prophylactic room, consulting room, laboratory, reception room, two dressing rooms and a private toilet. In spite of this large number of rooms, the

space occupied is only about forty-five feet by thirty.

Dr. Geary's office is somewhat smaller, although it occupies a similar location on another floor. In connection with it is a surgical operating room, with its accompanying services, using Dr. Geary's reception room. The financial management of this operating room is somewhat peculiar. It is maintained by Dr. Geary, although he does not use it for his own cases, and is leased by him to the various surgeons who may wish to make use of it.

It is intended only for minor operations, and does not compete with the hospital. Two recovery beds are provided in the room adjacent, and two graduate day nurses are regularly employed, a night nurse being sent for when a patient is not sufficiently recovered to leave before night. The operating room has a floor of vitreous tile, and woodwork finished in hard white enamel, and is

equipped with all the surgical apparatus appropriate for its use.

From the consideration of these and other offices certain general rules may be deduced, for use in the planning of future installations. The width of a dental operating room should be not less than seven or eight feet, its depth about nine or ten, and somewhat more if a laboratory bench is to be in the same room. When a separate laboratory is used, this requires a space about four feet by six, although it may advantageously be larger. The operating room requires strong but diffused direct light, and should therefore have one or more windows, as large as possible, and preferably facing north. In the Cobb Building most of the dental offices are on the north side, the rest of the space being occupied by physicians, surgeons, and oculists.

The reception room may be fairly small, and lighted entirely by electricity, as few patients now come except by appointment, and they need seldom wait a long time. The ladies' retiring room may be quite small, about five feet by seven, as it need contain only a dressing table, chair, and couch, with a lavatory if convenient.

A small store room is of value, though not indispensable, and an office desk should be provided, in some part of the suite. The space necessary for these various rooms seems best furnished by a column spacing of about seventeen feet, with a depth of from twenty-two to twenty-six, according to the individual office arrangement, and the Cobb Building conforms very nearly to this requirement.

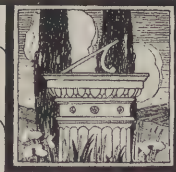
The finish of the building is of a simple and sanitary character, walls and ceilings being treated with a smooth washable cement paint. The oak trim is of the

simplest character, and the floors are of hard maple. Floors with cove terazzo base have been used in part of the building, but have not shown a rental value to justify their more extended use—in Seattle at least. Ventilation has been provided for by a special type of window ventilators, installed throughout the building, and since placed on the market.

In addition to the offices of about fifty dentists and over one hundred other practitioners, the Cobb Building accommodates medical and photographic laboratories, dental and medical supply houses, the offices of the Board of Health and the State Medical Library Association, all features that increase the convenience of its use to the tenants. There is also an installation of hydrotherapeutic baths, with an office and reception room, various rest rooms, massage rooms, salt baths, electric baths, hot air baths, and toilets for both sexes, as well as a large douche room with massage room attached. The building contains also a lunch room, hair dressing and manicuring establishment, and other similar installations appropriate to its special use. It is, in fact, reserved entirely for medical and dental purposes, with their subsidiary services, except for a part of the first floor and basement.

When the building was opened, certain co-operative suites were installed, for the use of those having a small practice, not justifying separate offices. These have since been abandoned, being found less profitable to the owners than a division into individual suites. Similar arrangements, however, have proven more profitable in other cities, and the experiment might be worth trying elsewhere, and would certainly be appreciated by many of the younger practitioners.

PORTFOLIO OF CURRENT ARCHITECTURE



ROSE



HOUSE AT 15 EAST SEVENTY-FOURTH STREET, NEW
YORK CITY. HEWITT & BOTTOMLEY, ARCHITECTS.



DETAIL OF FACADE—HOUSE AT 15 EAST
SEVENTY-FOURTH STREET, NEW YORK
CITY. HEWITT & BOTTOMLEY, ARCHITECTS.



DRAWING ROOM—HOUSE AT 15 EAST SEVENTY-FOURTH STREET,
NEW YORK CITY. HEWITT & BOTTOMLEY, ARCHITECTS.



DINING ROOM—HOUSE AT 15 EAST SEVENTY-FOURTH STREET,
NEW YORK CITY. HEWITT & BOTTOMLEY, ARCHITECTS.



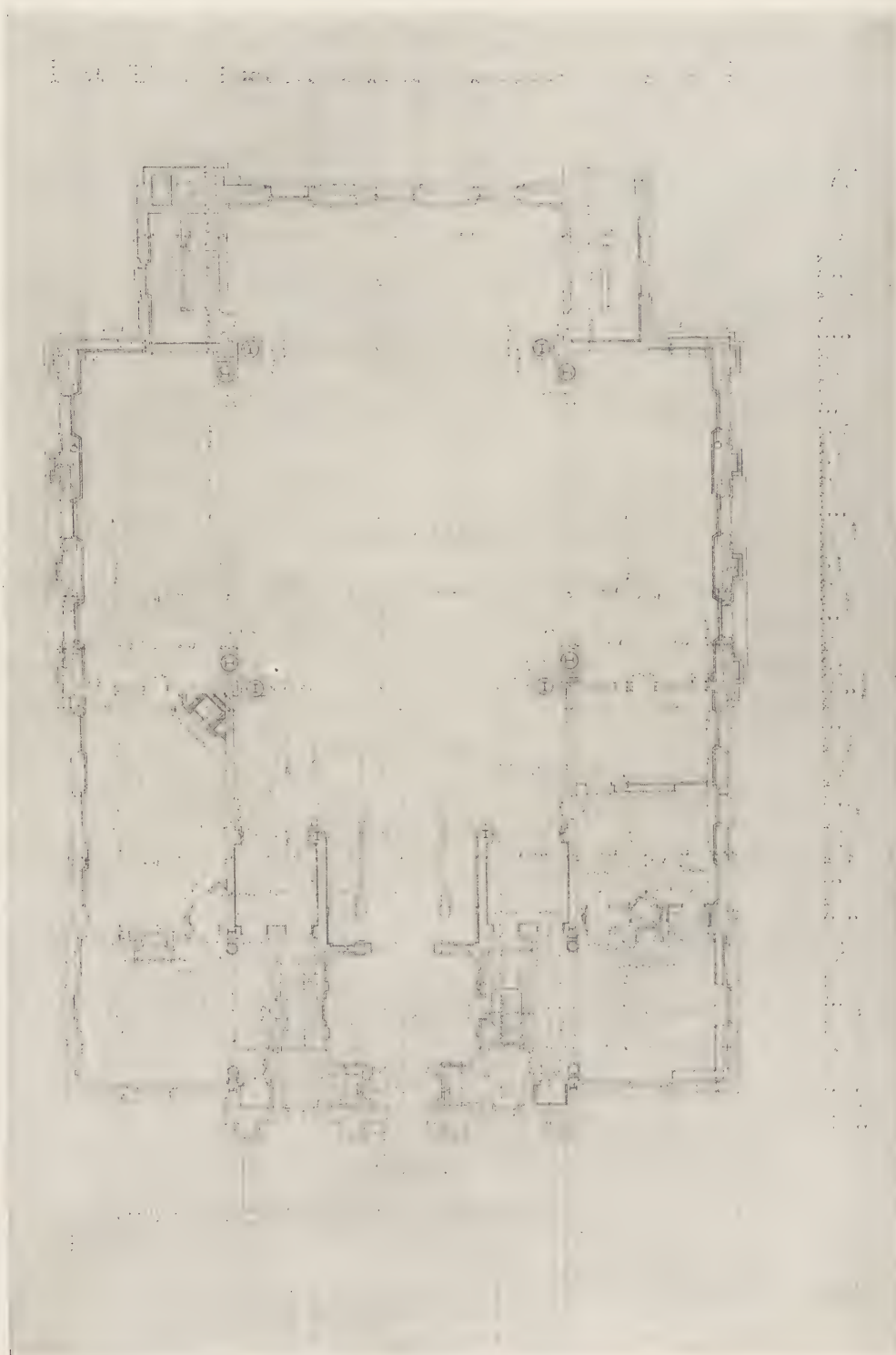
DETAIL OF DINING ROOM—HOUSE AT 15 EAST
SEVENTY-FOURTH STREET, NEW YORK CITY.
HEWITT & BOTTOMLEY, ARCHITECTS.



LIBRARY—HOUSE AT 15 EAST SEVENTY-FOURTH STREET, NEW YORK CITY.
Hewitt & Bottomley, Architects.



LIBRARY—HOUSE AT 15 EAST SEVENTY-FOURTH STREET, NEW YORK CITY.
Hewitt & Bottomley, Architects.



PLAN OF FIRST FLOOR—ROSSIA INSURANCE
COMPANY'S BUILDING, HARTFORD, CONN.
EDWARD T. HAPGOOD, ARCHITECT.



ROSSIA INSURANCE COMPANY'S BUILDING, HART-
FORD, CONN. EDWARD T. HAPGOOD, ARCHITECT.



ROSSIA INSURANCE COMPANY'S BUILDING, HARTFORD, CONN.
Edward T. Hapgood, Architect.



MAIN ROOM—ROSSIA INSURANCE COMPANY'S BUILDING, HARTFORD, CONN.
Edward T. Hapgood, Architect.



DETAIL OF MAIN ROOM—ROSSIA INSURANCE COMPANY'S BUILDING,
HARTFORD, CONN.
Edward T. Hapgood, Architect.



UPPER STAIRCASE—ROSSIA INSURANCE COMPANY'S BUILDING,
HARTFORD, CONN.
Edward T. Hapgood, Architect.



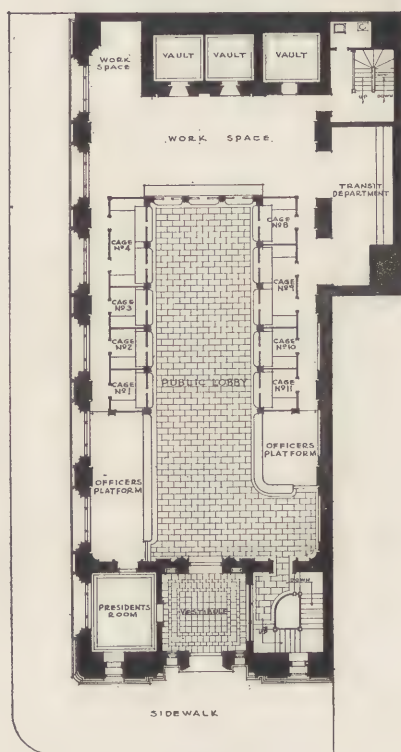
NEW STATE CAPITOL, SALT LAKE CITY, UTAH.
R. Kletting, Architect.



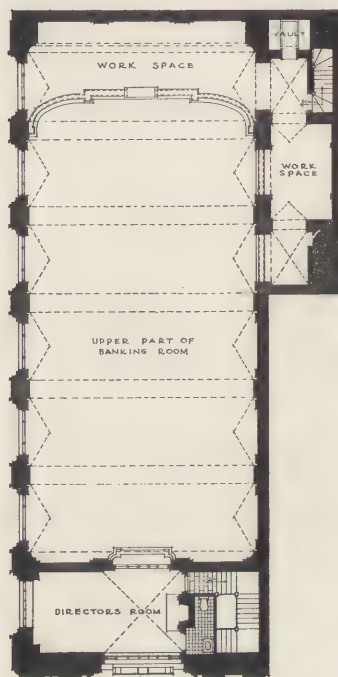
NEW STATE CAPITOL, SALT LAKE CITY, UTAH.
R. Kletting, Architect.



CITY NATIONAL BANK, EVANSVILLE,
IND. MUNDIE & JENSEN, ARCHITECTS.



MAIN STREET
FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"

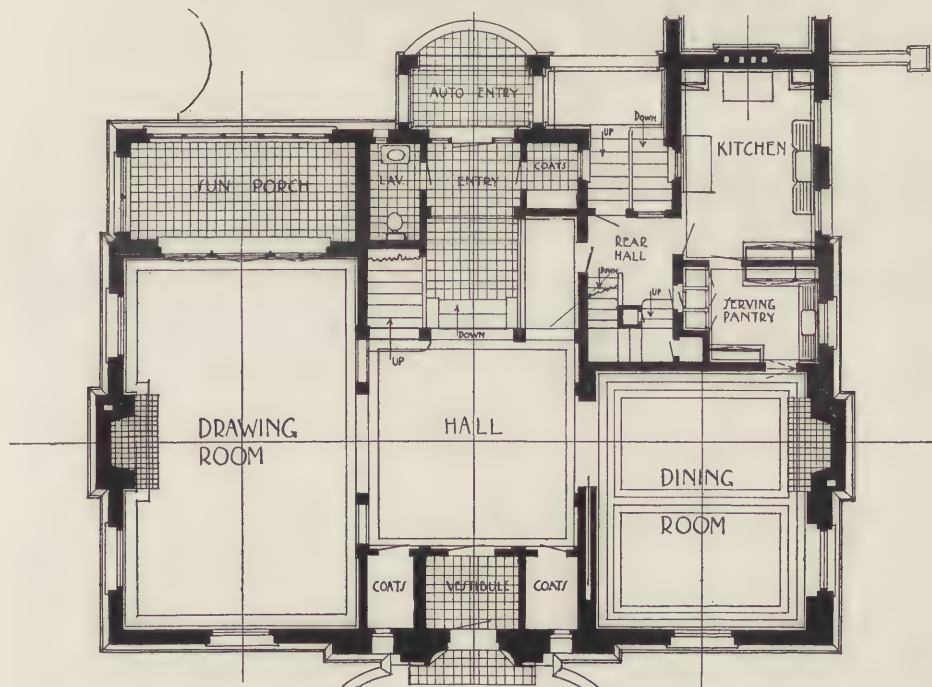


MEZZANINE FLOOR PLAN
SCALE 1/8" = 1'-0"

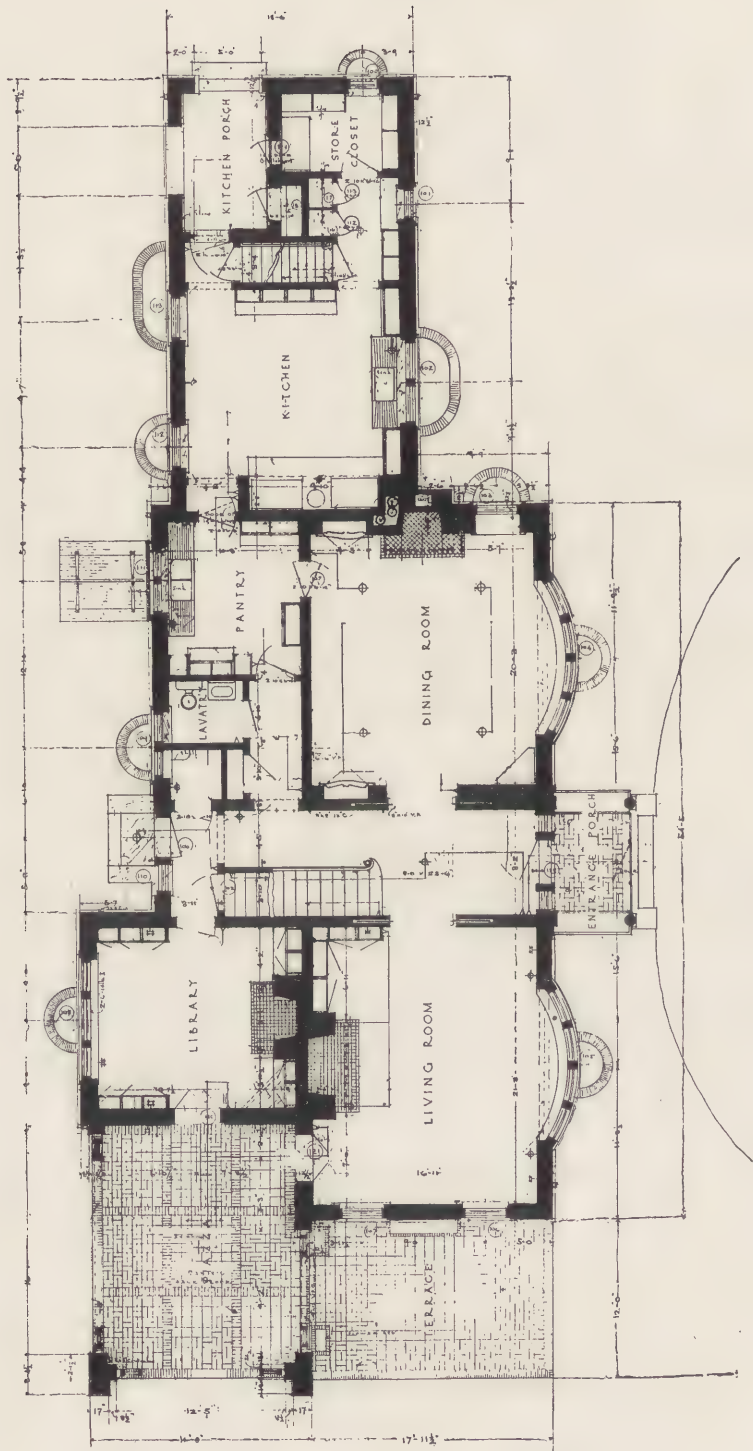
FLOOR PLANS—CITY NATIONAL BANK, EVANSVILLE, IND. MUNDIE & JENSEN, ARCHITECTS.



RESIDENCE OF EDWIN M. COLVIN, ESQ., CHICAGO.
George W. Maher, Architect.



PLAN OF FIRST FLOOR—RESIDENCE OF EDWIN M. COLVIN, ESQ., CHICAGO.
George W. Maher, Architect.



PLAN OF FIRST FLOOR—HOUSE ON' LLANFAIR ROAD,
ARDMORE, PA. HORACE WELLS SELLERS, ARCHITECT.



HOUSE ON LLANFAIR ROAD, ARDMORE,
PA. HORACE WELLS SELLERS, ARCHITECT.



Personal Reminiscences of
CHARLES FOLLEN McKIM

— By Glenn Brown —



❖ *McKim's Way* ❖

McKIM'S way, which in my experience led to success, was a most interesting study of personality. There was, in his intercourse with others, an innate diffidence which was flattering, a charming deference which was winning, a fund of knowledge which was convincing, a refinement of taste which was enlightening, a breadth of view which was enlarging, a concentration which was absorbing and a persistence which was successful. Positive in his convictions, sensitive, refined and unerring in his judgment of beauty, persistent in carrying out his ideas, he was unrivalled, in my experience, in winning against opposition.

He entered a discussion by apparently agreeing with his opponent, frequently calling attention to good points not seen by the author, then, bit by bit, a suggestion was made here and there, showing where the scheme or idea might be improved. The suggestions often called for radical changes, and I have yet to see anyone fail gladly to avail himself of the ideas offered, as they were always good. His concentration on the subject in hand was most notable; no side issues or outside problems, no matter how important, were allowed to interfere.

His study of a subject was painstaking and exhaustive, starting with the broad principles and descending to the minutest details. His power of enthusing others through his charming deference and clear ideas was exceptional, whether it was brought to bear on a strenuous President like Roosevelt, a great college President like Eliot or broad statesmen like Elihu Root, an eminent brother artist like Saint Gaudens, a literary enthusiast like Gilder, or a cosmopolitan like Frank Millet. The capacity of exciting enthusiasm and securing co-

operation extended through his office to the youngest draftsman. This power made many of his dreams for the advancement of the fine arts and the culture of the people blossom out into realities.

Time and labor were never considered by him or by those enthusiastically working with him; the object in view was the most perfect design or the best method of advancing the fine arts.

McKim's way is well illustrated by the following occurrences which came under my knowledge.

The American Academy in Rome was started by the brilliant group of artists who had charge of the Chicago Exposition in 1893, to give our country a post graduate school of architecture. It was soon after I became secretary of the American Institute of Architects that I became, through McKim, interested in the future of the American Academy. For years he had largely supported the school from his private income, and it was his ambition to secure an endowment and see it firmly established before his death. He felt keenly that a school of this character was the surest step toward advancing the fine arts and adding to the refinement and culture of the public. His first move was to secure an endowment and one of the means he adopted was the noted dinner of the American Institute of Architects, a full account of which has been given in a previous paper. McKim thought a national charter was necessary to give the Academy a recognized dignity among the other foreign schools in Rome, which are all endowed by their governments, while the American school remained only a private affair. To secure the national charter required an act of Congress. To get an act of Congress called for the

approval of the Committee on Library. To get the approval of the Committee on Library required Speaker Cannon's approval. Cannon was opposed, he said, because while the bill for a charter did not call for an appropriation, it was only an entering wedge for final government support of the school.

For several years the bill was held up by the Committee of the House. Finally Representative J. T. McCleary from Minnesota was persuaded by Cass Gilbert, whom McKim called to his assistance, and Gilbert's friends from Minnesota, to take an interest in the subject and Cannon allowed a favorable report to be made. I think Cannon felt assured that the measure would be stopped in the House, as a single objection would kill the bill for that session, as the bill must be brought up out of the regular order and during the last days of the session.

Representative J. T. McCleary and Representative Henry Kirke Porter gave us the names of the five Representatives, any one of whom if present would object and thus prevent the passage of the bill. McKim laid his plans to ward off these objections by securing the aid and co-operation of prominent men in the State of the member. I recollect I was delegated to see Secretary Hay, who was a friend of one objector, and secured his assurance of help. Aid was sought from New York, Chicago, St. Louis and Boston for this purpose and all asked responded to the call.

There was one objector from the South, and W. S. Eames got an assurance from a Representative that he would take the member down for a drink just before the bill was called. The bill came up, no objection was raised, due to the carefully laid plans of McKim, and passed the House.

The Senate had already passed the bill, but slight modifications made it necessary for the Senate to again pass upon the measure and it was the last day of the session.

I had been in touch with Senator Newlands and Representatives Porter and McCleary during the days of the campaign, and acting on instructions, I secured a copy and hurried over to the

Senate with the modified charter. Senator Newlands immediately brought it before the Senate, by previous arrangement, but here again a single objection would have prevented its passage. Senator Teller, as we knew, had signified his intention to object to all bills of this character. Senator Newlands when it was read went across the Senate chamber and sat by Senator Teller and as he arose to object, Senator Newlands actually pulling him down by the coat tails, asked as a personal favor that Teller allow it to come before the Senate for consideration. The Senator yielded to this personal plea.

The bill passed and was signed by President Roosevelt and the American Academy in Rome received its national charter. McKim felt that we had started the Academy on a firm foundation.

The first home of this school was a rented building, the Villa Aurora; the second was the Villa Mirafiore (without the walls) presented to them through the generosity of Mr. Henry Walters; the third and permanent home, given a short time before McKim's death, is the Villa Aurelia on the summit of the Janiculum Hill in Rome. This Villa within the walls overlooking the historic hills, cathedrals, arches and temples of Rome from the Alban Hills to the Mediterranean, was devised to the Academy by the will of Mrs. Clara J. Heyland, formerly Miss Jessup of Philadelphia, as a memorial to her parents and to assist and encourage education in the fine arts.

This Villa makes real the dream of McKim, which revealed a place where the students would be constantly in the atmosphere and under the influence of Rome and nearby Italy, in daily association with its enlightening antiquities, being adjacent to the Villa Pamfili Doria, not far from Saint Peter's, the Vatican, and the Roman Forum. New buildings are being erected to give the students studios and work rooms, and a fine library, reserving the Villa for the residence of the director and more or less public functions.

Through the zealous and wise conduct of Mr. William R. Mead, who became president after McKim's death, and Frank Millet, appointed director, the



AMERICAN ACADEMY IN ROME. Mc-KIM, MEAD & WHITE, ARCHITECTS.

school is now in a position to fulfill in the highest degree the ideals of Charles Follen McKim, who left his estate, subject to a life annuity to his daughter, to carry forward the education of the bright students in sculpture, painting and architecture, who will by their good work in the future interest, enlighten and lead the public to demand only the best in the fine arts.

McKim's persistent way of searching for and attaining the best results was shown vividly to me in his design for the base of the Sherman Statue in New York. One day he was lunching with me at the Cosmos Club, when he opened the conversation by saying, "I am thankful Saint Gaudens and I have settled on the design of the base for the Sherman Statue. My first idea was a high base something on the order of Colleoni, while Saint Gaudens wanted the figure only a few feet from the ground. We have compromised, making it higher than he first wanted it and lower than my first idea. I have made about fifteen hundred studies for this base and I am thankful that it has been settled."

We had not been at the table half an hour when McKim received a telegram which he opened. A curious expression crept over his face as he read the telegram to me: "Charles, that base is all wrong. Gus." I don't know how many other studies were made before these two men of genius were satisfied, as they finally were, with the result. Just before the Sherman Statue was unveiled I spent three hours with McKim and Saint Gaudens at the statue while they were discussing pro and con the minor details of the tone for bronze in the ornaments on the base to make it harmonize with the gilded statue and red granite base, and the question of leaving the sculptured earth on which the figures stood, as it was cut of red granite, or gilding it to go with the statue.

During the three hours many tints were tried on the bronze band and on the trophies, and each shade carefully considered in its relations to the granite base and to the bronze sculpture. The tints were chosen and the determination reached to gild the sculptured stone earth

just in time to have them ready before the unveiling.

It was McKim's way to give of his time and talent to serve the public, as in his constant efforts to maintain the design of the Park Commission Plan when new buildings were erected or new parks planted.

He freely gave of his time and talents on juries for selecting the designs for public buildings and monuments. He was one of the jury which selected the design for the Bureau of American Republics, one of the most satisfactory structures of recent date, and his criticisms and suggestions for modifications and changes were of assistance to the architects, Messrs. Kelsey and Cret.

He was one of the jury in selecting the memorial to Grant which is now being erected at the eastern end of the Mall, and he not only selected a monument that would be suitable for this most important position, but by his advice made it more fitting than it was in the original form.

McKim's way caused him to often try full size models or sections in place, ignoring the criticism of the thoughtless, so as to judge more clearly of their scale and relation to each other. I recollect spending an afternoon with him in the Harvard Club building, New York, when he was experimenting with the beams in the ceiling, trying their depths and distance apart until he had arrived at the solution which he thought best. At the same time several designs for paneling the lower third of the walls, made full size, were put in place and the one most suitable chosen. All acknowledge that this hall is one of our best interiors.

He acted in an advisory capacity in many directions in which, while not adding to his reputation, his good judgment was of great value to the community which sought his advice, as was the case in saving the Confederate State Capitol in Montgomery, Alabama. Additions to this old building, a good example of the Greek revival of about 1820, were contemplated; and some of the officials being sufficiently doubtful of their capacity to undertake these changes, determined to ask McKim's advice or judgment on the proposed additions. I received a letter



FOUNDERS' COURT-AMERICAN ACADEMY IN
ROME-McKIM, MEAD & WHITE, ARCHITECTS.



ENTRANCE VESTIBULE—AMERICAN ACADEMY
IN ROME. McKIM, MEAD & WHITE, ARCHITECTS.

asking if I would go with him to the hearing on the subject, before the Governor and other State officials, in Montgomery, Alabama. We spent the next day in the drawing room of the Pullman, studying the drawings of the proposed additions, which would have overshadowed the original building and destroyed its dignity and importance. He mapped out the proposed changes in the drawings which he considered would keep them in harmony and subordinate to the old structure. The arguments for the changes were mapped out so the case was well prepared when we met the Governor and his official family the next day. After McKim had given his views, he called upon me as author of the History of the United States Capitol, to give mine, which it goes without saying coincided with his. Advocates of the improper scheme as proposed made their statements and cross questioned McKim and myself. Before the meeting was over we could see that the majority was with us and the Confederate State Capitol was saved.

During our trip McKim said, "If my father knew I was trying to save the Confederate State Capitol where Jefferson Davis took the oath of office and was inaugurated President of the Confederacy, he would turn over in his grave." McKim's father was a clergyman and strong abolitionist.

It was McKim's way to draw to him by his charming, lovable disposition, brilliant mind, sensitive and highly cultivated sense of the beautiful, keen appreciation of the best in literature, music and the fine arts, other spirits who were seeking the best in art, literature, education—such intimates as Richard Watson Gilder, Augustus Saint Gaudens, D. H. Burnham, Frank Millet, John La Farge, Elihu Root, Joseph Choate, Nicholas Murray Butler, Charles Eliot and Theodore Roosevelt. It was to McKim that such men listened and by whom they were swayed and guided in discussions of the fine arts. When one differed with him those who did not know would think he had changed his views, while he was simply working around to it by what appeared to be roundabout paths, but by ways that carried him and his op-

ponents with him to his goal. He never gave up until he gained his end in every instance that came under my observation.

Another factor in the success of McKim's way was his genius as a designer.

I recollect very well as a young man the sad feeling of disappointment, when McKim, Mead and White showed their tendency in design as illustrated by the Boston Public Library and other early work.

I had only a short time before left the Massachusetts Institute of Technology, where just across the street Richardson was completing his great masterpiece, Trinity Church, which enthused me, as it did many others, with the idea that the true expression for American architecture was the Byzantine or Romanesque. Many of us felt that this style, which never reached its highest expression in the old country, was capable of development into a national distinctive style and that it would reach its artistic development in this country through the genius of H. H. Richardson and his students.

When Charles McKim and Stanford White, two of the brilliant men in Richardson's office, showed they were not following in the Byzantine, but were adopting the Italian Renaissance, I was distinctly disappointed, as I thought they were the men to give us a national style developed from the beginning by Richardson.

As the years passed and I saw the effect of Richardson's brilliance and personal genius as it spread over the country and the woeful results produced by the strong men and the weak men in attempts to follow his example, my views changed. It may be safely said that no building, among the thousands erected as Richardsonian or Romanesque, can even approximately be thought a work of art, except those on which Richardson left his personal impress. I began to feel that it was a misfortune that any one tried to follow Richardson, and I am now glad that no one attempts his style. As the years passed I became more and more enthusiastic on the work of McKim, Mead and White, particularly admiring the

buildings in which the design was attributed to McKim.

The grasp of big composition, careful proportions, the charmingly refined details, the due consideration of the setting and harmony with surroundings, the treatment of landscape with just the proper formality to enhance the building, all were more perfect and more artistic than had been done in this country before.

Nothing in this country, and I know of nothing better in other countries, illustrate these principles more fully than the approaches and flanking buildings combined with the Columbia Library, New York. Here we have dignity, harmony, good proportion, refined detail, combined with just the proper formal landscape, making one of the great architectural compositions of the world.

I was very much interested some time ago in attending a lecture on modern architecture, where there was a mixed audience of some six hundred people. Views were given of noted foreign buildings, showing their influence on American work. Views were given of the noted buildings in this country. When the view of the Morgan Library, New York, by McKim, Mead and White, was thrown upon the screen, there was a spontaneous burst of applause and this was the only slide among the many good things shown that produced applause.

This showed an appreciation of the beautiful by a mixed American audience that I felt augured good for the future of the fine arts. McKim's influence, in simplicity, harmony, refinement, and landscape, has been one of the greatest factors which, spread through the great men who have graduated from his office on whom his principles have been impressed, has placed architecture in this country in the forefront in modern architecture.

Another factor that led to success in McKim's way was the power of con-

centration, the faculty of wiping from his mind surroundings, other problems and conditions, and focussing his mind on the problem in hand.

It was this concentration, while innumerable other problems were thrust upon him, but ignored, that proved so successful in his work of restoring the White House, in designing the great plan for the Mall in Washington with its great vistas and monumental memorials and buildings, and in his work for the public through the American Institute of Architects which proved so effective and satisfactory.

McKim's way meant loyalty, through good and evil report, to friends and associates when he had tested and knew the good qualities of a man or the capabilities of the artist. He defended them against malicious attacks and brought forward their good qualities and good works. On many occasions it has been my pleasure to hear him defend men to whom false motives had been attributed; while it was difficult for him to see the evil, he was quick to see the good in a person.

McKim was diffident in expressing himself before a large body of men and his delivery was not impressive, as he often hesitated and apparently missed the proper word. Strange to say that while a stenographic report of his speeches required but little change, many of the ready and fluent talkers had to rewrite their efforts. In his hesitation he found the right word to convey the thought; it was McKim's way to seek, while apparently hesitating, the word best suited to the idea.

McKim's way drew around him a coterie of men, idealists, but practical in presenting, persistent in maintaining and effective in attaining their ideals, among which was the advancement of the nation in the fine arts; they believed appreciation of the beautiful by the people was a long step in the culture of the nation.



BOOKS ON COLONIAL ARCHITECTURE

By RICHARD FRANZ BACH

Curator, School of Architecture, Columbia University

Part III.—Dwellings

AS logically as the Eskimo builds his igloo of ice, does the Colonial pioneer erect his house of wood; his first building, whatever its purpose, was assuredly a log house. A group of small log house dwellings centered about a larger log house of sufficient size to shelter most of the small community and of sufficient strength to withstand a military undertaking against it. Occasionally, when hunting or trade drove the settler into the wilds, perhaps as a trapper or dealer in furs, his dwelling, as a remote outpost of civilization, became in fact and of necessity also his castle, and was correspondingly conceived. It took on certain aspects of defense and found but small use for decorative detail. As all such outposts were ultimately engulfed by the advancing tide of civilization, they leave but little impress on the architecture of which they formed one of the first and most truthful manifestations. At the outset, of course, the actual difference between this outpost dwelling and the dwelling nearer the coast lies only in the degree of danger to which it is exposed. The decorative beginnings are not long outstanding, however, and soon add a restrained charm to a type of building that

had the benefits of a plentiful supply of wood and more limited supply of bricks, yet had at the beginning only a minimum of mechanical skill to rely upon.

Progress was, in modern terms, very slow until the sawmill became an established fact in the new land. This aid brought proper materials readily to hand and its effective work is apparent at once. But the majority of the settlers, confronted with the problem of increased architectural development brought about by the sawmill's help and encouraged by the growing wealth and prosperity born of Colonial peace after 1730—and but little good Colonial work antedates that time—seems to have had no alternative in design but to hark back to English models for the larger buildings of the third and fourth generations. The conception of a full-fledged and indigenous wood architecture, the product of the soil, an autochthonous or home born development such as that of Switzerland, the Tyrol and of Scandinavian countries, found no place in his reasoning. Thus the log house beginnings are seen to aspire to the high places of European architecture despite the handicaps brought about by a lack of technical skill and ar-

tistic ability. The more important buildings of domestic type indicate the direct suggestion of the home country very early. The architectural vagaries of the carpenter are the immediate result of the translation of stone forms into wood and by the translation contribute not a little to the character of Colonial building in certain districts. The Dutch settler, and also the Swede, are impelled by similar traditions in their respective national terms. The larger houses which at the outset were not thus inspired from homeland types were likewise of little architectural merit. Thus, in the sentiment of Lowell concerning Cambridge, many of the early cities were but English villages poorly transplanted. The same was true of the Colonial centers of other nationalities represented in the new world.

As a single and refreshing exception to this rehabilitation of models drawn from the mother country, we come upon the cottage type, with its long sweeping roof falling away toward the rear of the house and canting off a corner from each story on its way. This type has persisted and seems to have been one of the earliest and most rapid of the various phases of domestic development. It was especially characteristic of New England and both there as well as in the central States has formed the basis of interesting derivations in design at later times.

In general it may be said that, as a truthful product—in fact, as a kind of signature—of the Colonial epoch, our formative architecture may be subdivided into a number of regional varieties, the geographical distribution of these being controlled by the fundamental economic conditions imposed by different methods of land holding. Thus the landed gentry of the early times were found chiefly in the South and in New York State; while in Pennsylvania and in the New England States the small farmer prevailed and merchants fostered the rapid growth of cities. As a result, the manorial type of living flourished on the Southern plantation about the spacious mansion, usually of a size calculated to house many more than its owner's family, and also in the country residences situated upon the old

established land grants of New York. Along the shore of Massachusetts and Connecticut, as well as in the commercial communities, many towns offer a wealth of city residences. Boston, New York and Philadelphia soon spring into the lead, while in the interior of these colonies and in the hinterland of New Jersey and Pennsylvania the sturdy yeoman builds his more modest but none the less characteristic farmhouse, without pretense but in full enjoyment of comfort. The Dutch farmhouse in the latter districts in particular soon crystallizes its own easily recognizable type whose influence also reaches into the present day, as any survey of current country house building will show. Meanwhile the hegemony of wood has been challenged by brick makers and stone cutters, though for some time any carving of importance whether stone or wood was imported in finished state or else executed by imported carvers. Many a shipload of bricks was brought from Holland; in fact, whatever Dutch city architecture there may have been in New York City, for instance, was from the very beginning predominantly of brick. In certain other Northern cities, as well as in some Southern districts, brick also asserts itself, especially after the manufacture of this material had become an established industry in the colonies. Stone appears in many farmhouses, both small in New Jersey and Pennsylvania, and large in parts of New York. In New England wood remains paramount.

In the ensuing papers covering our study of the literature of Colonial architecture, which deals chiefly with domestic buildings, we shall follow the triple subdivision of the original territory into New England, Central and Southern States, not that this subdivision has any decided advantages, but simply to carry through the logical disposition of groups of communities later to become States in a geographical sense, which also expresses itself with fair exactitude architecturally. We shall not attempt to offer a general résumé of existing dwellings as a preface to the discussion of the books, as was done in the case of the secular edifices; this will be amply provided for in the reviews to follow. Furthermore,

since, our early architecture, like most modern architecture, was predominantly domestic, the extant examples are too many to permit separate enumeration.

The books available in the field of Colonial dwellings are chiefly of two kinds: those most readily classified as general historical or as popular works and those which devote themselves to a more definite architectural purpose, carried out through the agency of photographs or measured drawings with details of construction or of decoration. Not a few bold spirits have undertaken a general treatment of domestic buildings throughout the original thirteen States and have confined themselves to but one or two volumes. Such studies have invariably been entirely non-architectural and they have, furthermore, in many cases savored of the popular tendency of a certain type of talkative guide books. What is more, in any event, only a limited number of exceptionally good or important examples could be shown. The works which have been careful to maintain a closely architectural view-point have of necessity treated the buildings only, without reference to the occupants. A thorough treatment of the field has, of course, not yet been undertaken; if such a thorough treatment is understood to include measured drawings of interesting details of a goodly number of the most representative building types in each of the three fairly well developed sections of the original revolutionary territory.

Among the works which grant chief consideration to the occupants of Colonial mansions those of Marion Harland, entitled *Some Colonial Homesteads and Their Stories* and *More Colonial Homesteads and Their Stories* are perhaps the best so far issued. In these volumes the author has dwelt upon the colorful historic background for each dwelling, recording carefully estate histories, owners' descent, romantic marriages and similar matters of importance to the chronicler of intimate family life for which the dwelling proper offered an entirely adequate stage setting. She has made a systematic study of all available records, manuscript tailed stylistic conception of the various of other objects still contained in many of

the extant houses discussed, and she has brought to her work a conscientious accuracy in regard to historical data which forms a sustaining framework for studiously collected anecdotes of individual and family biography. The whole conception of both volumes may be styled popular in so far as that word may indicate the avoidance of the dry manner of writing of the historian and also the total elimination of any attention to architectural forms. The books are well printed. There are many illustrations and the stories of no less than nineteen Colonial homes are told in the first series and of fourteen in the second series. The various chapters are not made to depend upon one another in any sense; in fact, a number of them have appeared individually as contributions to periodicals. The many accounts are presented in very attractive style and may be considered of value in connection with more thoroughly architectural works as a basis of verification in regard to detail matter for which professional publications of necessity reserve but little space.

A similar point of view is maintained throughout in a volume on *Our Colonial Homes* by Samuel Adams Drake; in fact, if the books by Harland are available that by Drake and perhaps one or two others may be readily dispensed with. A one-volume undertaking in this field can offer but little consolation to both author and reader unless the study is restricted to a very limited area or perhaps even to a small group of buildings representing the same type of colonial life such as, for instance, a group of plantation residences of the Southern type or of city mansions of the Boston or the New York type.

Mr. Thomas Allen Glenn, in *Some Colonial Mansions and Those Who Lived in Them* has to a certain extent maintained such a segregation of a given number of the old houses. As was the case with both the books reviewed above, he allows no definite connection to obtain between discussions of different buildings. No great amount of architectural knowledge would have been necessary as a basis for a running critique of the detailed stylistic conception of the various houses considered. In such rapid criticism

very little detail would have sufficed and by dint of occasional comparisons a greater unity would have been achieved. In their present guise the two volumes composing the work are each subdivided into a series of chapters bearing no relation to one another. The difference between the two points of view will be appreciated at once if it is understood that the modification suggested above would readily transform into a readable history a volume which in its present form must remain a detailed reference work. The intrinsic value of each chapter, however, separately considered as the life story of a single family and the old manor house about which its activity centered, is not in the least impaired by the arrangement adopted. Each discussion is followed by profuse notes and usually by a genealogy. A close study of the volumes will bring to the reader's attention many appealing characteristics of colonial life, both in its English and in its Dutch aspects. But, as was the case with the other books thus far discussed, but little detail or even accurate general architectural information may be gleaned from the work. The volumes are very well presented typographically and profusely illustrated.

In *Stately Homes in America, from Colonial Times to the Present Day*, Mr. Harry W. Desmond, at one time editor of the Architectural Record, and Mr. Herbert Croly, who is now a contributing editor, have presented in eight long chapters, very well printed and illustrated, the whole life story of American dwellings of pretentious character from the dignified home of our first President at Mt. Vernon and its compeers, to palatial modern residences in New York, Philadelphia, San Francisco, Bar Harbor and Newport. As its title indicates, the volume does not concern itself with the humbler dwelling nor does it devote much space to architectural discussion in a technical sense. It is of decided interest to those who wish a general survey of American residential architecture chronologically presented; the authors have been careful to reserve for treatment a definite and very attractive portion of the vast field of house architecture. It is assuredly a praiseworthy volume and it is, fur-

thermore, of particular value to that much maligned stratum of society known as the dilettante, a class of persons in which might reasonably be included all who are not connected with a given field in a definite professional capacity. To such persons the last two chapters of the volume under discussion which treat of exteriors and interiors in a general architectural way would be of especial interest. For our purposes, of course, only the early part of the book has a decided application. This gives a fair résumé of the character of the larger Colonial and transitional residences.

A much more inclusive work of similar purpose is that entitled *American Renaissance, a Review of Domestic Architecture*, by Joy Wheeler Dow (New York, The William T. Comstock Company. Small quarto., pp. 182, pl. 96, 139 ill., \$4.00). This volume contributes not a little to the general philosophy of good sense and good style in American domestic building. The author has long been known as one particularly interested in the Colonial field and has latterly distinguished himself in its interpretation or rather exploitation in the ultra-historical and studiously correct New Meeting House at Summit, N. J. A general appreciation of Colonial quality and a persistent desire to impress upon the reader the value of Colonial architecture to modern practice and modern architects in this country runs through the series of chapters, which follow through the volume, a fairly close historical analysis of the dwelling house. Introductory chapters are devoted to questions of "ethics" and of "art and commercialism." Later chapters make considerable progress in the fertile fields of "adaptation" and of "style." A large number of illustrations are presented showing all phases of American dwelling from the sturdy, true Colonial type to certain modern examples in the Middle West that have for a number of years been seeking recognition from a nation not readily reconciled to any further additions to the gamut of styles that must be run everlastingly to appease an alleged "eclectic taste," whether or no any national style shall ever be born of the process.

The modern examples referred to the author analyzes in caustic fashion as: Moresque Spanish, ten per cent.; Moresque Algerian, ten per cent.; California Mission, ten per cent.; East Indian, five per cent.; Chinese Ornament, five per cent.; the remainder, modern invention pure. In order that all essential items may appear in his stylistic balance sheet, he introduces the item Anglo-Saxon home atmosphere, opposite which he enters 00 per cent. One is left to believe that such a graphic analysis of modern dwellings or of modern architecture in general would place beyond the pale many a building that still justifiably claims the right to be seen and, what is more, to be considered a contribution to architectural growth in this country.

A number of other features in the vol-

ume partake of the same sprightly character evidenced by the analysis given above and which appears under an illustration of one of the offending designs. Although we cannot consider *American Renaissance* a valuable contribution to the list of essential historical works, we do not hesitate to grant it a very important position among the philosophical writings concerned with American art appreciation, and with the difficult problem of bringing home to the understanding of American people the true value of their splendid architectural heritage. The book is well worth reading and we are convinced that it will be read in many places where the sterner historical material has not as yet penetrated and for the study of which Mr. Dow's book will offer a readable preamble.

(To be continued.)



Paris, Past and Present. Edited by Charles Holme. Text by E. A. Taylor. Ill., 8½ by 11 inches, 200 p., including 10 plates in color. New York: The John Lane Co. (International Studio). \$3.00 net.

The Building Estimator's Reference Book, a Practical and Thoroughly Reliable Reference Book for Contractors and Estimators Engaged in Estimating the Cost of and Constructing All Classes of Modern Buildings, Giving the Actual Labor Costs and Methods Employed, etc. By Frank R. Walker. Ill., 4¼ by 6¾ inches, 592 p., index. Chicago: Frank R. Walker.

Michelangelo: A Study of His Life and Work. By Romain Rolland. Ill., 6½ by 8¾ inches, 167 p., index. New York: Duffield & Co. \$2.50 net.

Smoke Abatement and Electrification of Railway Terminals in Chicago. Report of the Chicago Association of Commerce Committee on Investigation. Ill., 9 by 12 inches, 1052 p., appendix. Chicago: Rand, McNally & Co. \$6.00 net.

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surance Co. Ill., 6¼ by 9¼ inches, 339 p., index, with 127 plate illustrations. Hartford: The Travelers Insurance Co. \$3.00 net.

Power for Profit, Principles Governing the Use of Machinery and Labor in Modern Buildings. By Reginald Pelham Bolton. 8 by 11 inches, 200 p., index. New York: The R. P. Bolton Co. \$2.50 net.

The Structure and Properties of the More Common Materials of Construction. By G. B. Upton, Assistant Professor of Experimental Engineering, Sibley College, Cornell University. Ill. 6 by 9 inches, 319 p., index. New York: John Wiley & Sons, Inc. \$2.50 net.

The Architects' and Builders' Pocket-Book: A Handbook for Architects, Structural Engineers, Builders and Draughtsmen. By the late Frank E. Kidder, C. E., Ph. D. Thomas Nolan, Editor-in-Chief, Fellow of the American Institute of Architects, Professor of Architectural Construction, University of Pennsylvania. Ill., 4¼ by 7 inches, 1772 p., index. New York: John Wiley & Sons, Inc. \$5.00 net.



The Various Vane.

The earliest weather-vane of which we have any certain knowledge was that which surmounted the Tower of the Winds at Athens, built by one Andronicus Cyrrhestes—i. e., Andronicus of Cyrrhus, in Syria—about a century before the Christian era. This unique monument still stands, but its vane has long since vanished. The building is octagonal, each side bearing in relief a figure symbolizing the wind that blew from that quarter. At the summit of the conical roof was a brazen Triton, holding in his right hand a wand, which always pointed to the panel corresponding to the wind blowing at the moment—or, let us say, was supposed to do so; for vanes were probably as uncertain a score of centuries ago as they are today, and the exposure of this particular vane, at the foot of the Acropolis, was highly unsatisfactory from a scientific point of view. The task of telling which way the wind blew was, moreover, made doubly difficult in those days by the fact that hardly two men agreed about the points of the compass—if one may use the latter expression in speaking of a time before compasses were. It was no simple question of north, east, south, and west. There were wind-roses of eight rhumbs, and wind-roses of twelve rhumbs; one man's Boreas was another man's Aparktias, with a separate and distinct Boreas farther to the east; in fact, to a certain extent, the wind directions were identified with particular points in the local landscape, and so were materially dislocated by a change of base. In the middle ages a twelve-point wind-rose prevailed. Only with the introduction of the mariner's compass arose the now universal notion of a horizon divided into thirty-two parts, designated by combinations of the names of the four cardinal points.

M. Terentius Varro, "most learned of the

Romans," had on his farm a vane that could be read indoors by means of a dial. This idea was revived toward the end of the sixteenth century of our era by another erudite Italian, Egnatio Danti (or Dante), who erected several vanes of this sort in Bologna and Florence. Some of Danti's vanes—an account of which he has left us in his "Anemographia"—were fitted with horizontal dials on the ceilings; others with vertical dials on the wall. Such vanes are still frequently constructed.

The belief is irresistible that the elaborate vanes of Andronicus and Varro must have had cruder predecessors, and that at least the former, which was celebrated in antiquity, must have been occasionally imitated; yet few notices of other vanes have come down to us from the classical period. A vane in the form of a Triton is said by Du Cange to have stood on the Temple of Androgeus, at Rome. A remarkable monumental vane was built at Constantinople—possibly during the reign of Theodosius the Great—in the form of a great column, which overlooked the whole city. The sides of the column were adorned with various rural scenes, perhaps typifying the different winds, while the heroic figure of a woman constituted the vane proper.

The weathercock, in the literal sense of the term, dates back at least to the ninth century, for in the year 1652 it was recorded that a vane of this shape then standing on a church at Brixen, in the Tyrol, bore an inscription stating that it had been erected by Bishop Rampertus in the year 820. Brewer, in his "Dictionary of Phrase and Fable," tells us that a Papal decree of the ninth century required that every church steeple should be adorned with one of these birds, as the emblem of St. Peter; but this statement lacks confirmation. The origin of the weathercock is, in fact, still obscure, though there has been no lack of speculation on the subject. One thing is certain: this particular form of vane was used widely, and almost exclusively, on ecclesiastical buildings for



SILHOUETTE PORTRAIT VANE.
Designed by Ernest Spital.

hundreds of years, and therefore must have had some special religious significance. The idea that the cock typified, not merely clerical vigilance, as is often stated, but the priestly office in general is curiously developed in a rather celebrated Latin hymn, "Multi Sunt Presbyteri," etc., supposed to have been written in or before 1420. A translation is given in John Mason Neale's "Mediæval Hymns and Sequences":

Many are the Presbyters
Lacking information
Why the Cock on each church tow'r
Meetly finds his station;
Therefore I will now hereof
Tell the cause and reason,
If ye lend me patient ears
For a little season.

Cock, he is a marvelous
Bird of God's creating,
Faithfully the Priestly life
In his ways relating;
Such a life as he must lead
Who a parish tendeth,
And his flock from jeopardy
Evermore defendeth—

and so on, through fifteen stanzas, drawing almost every imaginable parallel between Clerk and Chanticleer, even to the resemblance between the cock's bald pate and the tonsure.

It is scarcely necessary to deny the old story that the English chose cocks (galli) for their weather-vanes in order to ridicule the inconstancy of their neighbors the French (Galli). As a matter of fact, there are several records of weathercocks on English churches before the traditional feud between France and England began with the Norman Conquest; notably the representation of one on St. Peter's Church, Westminster, in the Bayeux Tapestry. Johann Beckmann, who has done more than anyone else to elucidate the history of vanes, cites from the life of Queen Emma, the consort of Canute the Great, the statement that a Norman fleet sent to England in 1013 had figures of birds on its masts, turning with the wind. Later in the century, William the Conqueror's ship had at its masthead a vane of gilded brass in the shape of a banner.

In mediæval France the banner-shaped vane was reserved for the use of the nobility. Originally it appears to have been the exclusive prerogative of those military

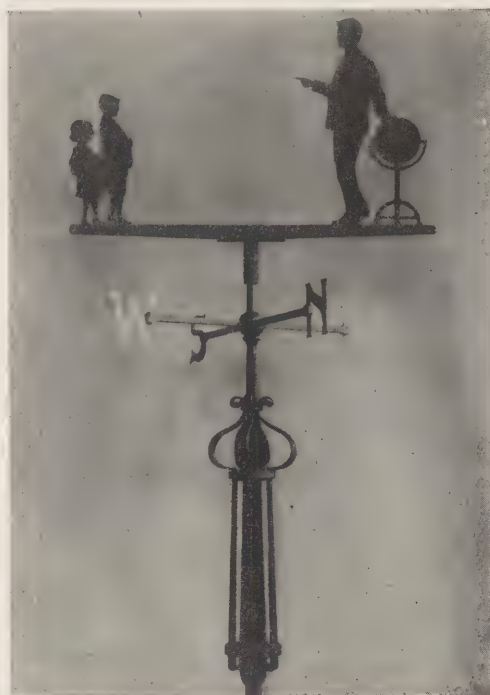


TABLEAU VANE.
Designed by Spital & Clark.

leaders who had first planted their banners on the walls of a captured city or castle; and again, the square vane was reserved for knights' bannerets, and the pointed vane for ordinary knights. Such vanes were commonly adorned with the owner's coat-of-arms, either painted or cut out. Many heraldic vanes of this character still exist, in both France and England. Some are surmounted by coronets. In Tudor England the rod on which the banner vane was hung was often held by a bird or beast, sitting on a slender pedestal. The banner-shaped vane is still a favorite with vane-makers. In trade catalogues such vanes are styled "bannerets."

Figures of angels have served as vanes on many churches, and various symbolical human effigies have fulfilled the same purpose on buildings of all kinds. St. Michael, who was invoked against lightning, was a favorite on fifteenth century cathedrals. The Giralda of Seville takes its name from the vane at its summit—a female figure which shifts quite as readily with the breeze as if the artist had not chosen to make it a symbol of Faith. This "Giraldillo" is of bronze, thirteen feet high, and weighs a ton and a quarter. It was cast by Bartolomé Morel in 1568. As the Giral-



SILHOUETTE PORTRAIT VANE.

Designed by Spital & Clark.



BANNER VANE.

Designed by Spital & Clark.

da furnished the inspiration for the tower of Madison Square Garden, so the Giraldillo is responsible for the vane of the latter—Saint-Gaudens's charming Diana. The angel on the cathedral at Berlin weighs about nineteen hundred pounds, and is one of the largest vanes in the world.

Vaness serve in an endless variety of ways to indicate the character or attributes of the buildings on which they are placed. The patron saint of a church is denoted by his appropriate symbol—as the key on the spire of St. Peter's, Cornhill, and the grid-iron on that of St. Lawrence, Jewry; both in London. The famous grasshopper on the Royal Exchange, in London, has an heraldic origin—it was the crest of Sir Thomas Gresham, the founder of the building. So has the dragon on St. Mary-le-Bow, this creature being the supporter of the City arms. One of the alleged predictions of Mother Shipton had it that when the dragon of Bow and the grasshopper of the Exchange should meet, London would be drenched with blood. They actually did meet in the year 1820, when the two vanes lay side by side in a stonemason's yard awaiting repairs, but without any dire sequel—though it was a day when England



CHIEF SEATTLE.

Decoration on Cobb Building, Howells & Stokes, Architects. (See page 154.)

would be . . . void. Yet, compared with such a masterpiece of French architecture as the Cour d'Honneur at Compiègne, by Gabriel, the grouping of the courtyard at Somerset House shows superiority."

Hawks- moor.

Queen Anne's Act, passed in 1708, provided a splendid opportunity for the growth of ecclesiastic building in London. The act made possible the erection of fifty churches and Nicholas Hawksmoor (1661-1736) was among the architects who benefited by the resultant distribution of commissions. An English contemporary, the *Architectural Review*, has prepared an accurate account of Christ Church, Spitalfields, begun by Hawksmoor in 1714 and finished fifteen years later, long after he had served his period of tutelage under gruff Sir Christopher Wren, who had

been his chief for thirty-nine years, and with Vanbrugh, whom he had assisted at Castle Howard in 1702. The most attractive feature of Christ Church is the characteristic tower, which rises in six stages to a height of about 225 feet. It is a creditable monument to the joint influence of Wren and Vanbrugh; witness the freedom from detail generally, an attribute of the "grand manner" of the former, and the window treatment found repeatedly in the towers of the latter. The east and west walls are extended north and south up to the fourth stage and then brought back to the body of the tower with a simple arc. Other notable examples of Hawksmoor's churches are St. Mary, Woolnoth; St. George's, Bloomsbury; St. Anne's, Limehouse, and St. George's in the East.

Trafalgar Square.

High on his column in Trafalgar Square old Nelson has since 1843 stood aloof from mundane criticism. At last he has come to grief, and the whole of the civic centre which he dominates has been considered inadequate because of him. In a paper read before the Royal Institute of British Architects, Mr. T. Raffles Davison has no pity whatever for the plaza which Americans find in London almost as readily as they seek out Times Square in New York, and he delivers himself of the following: ". . . it will never be a fine square so long as the Nelson Column remains—one of the most ridiculous monuments and effigies which have ever memorialized a national hero. We can never give Trafalgar Square a scale which will hold such a thing. Then the commanding site and dignified mass of the National Gallery is dominated by one of the most absurd pepper-box domes in London. When you look at the south side of the Square, everything is hopeless, though it might have been saved by a fine entrance to the Mall and a fine widening out of the Whitehall thoroughfare. The east and the west sides of the Square are not parallel, and the buildings which face them are only so good that they might be worse."

The Nelson Column is a copy of one of the columns of the Temple of Mars Ultor, the avenging god of war, in Rome. It stands 145 feet high and is surmounted by Baile's figure of Lord Nelson, which is 17 feet high.



COVER—THE GATE OF JUSTICE, AT GRANADA.	Water Color	Page
Drawing by John Mead Howells		
TWO COUNTRY HOUSES AT SOUTHAMPTON, L. I.		197
By John Taylor Boyd, Jr.		
EXAMPLES OF THE WORK OF MELLOR & MEIGS		212
By Harold D. Eberlein		
ALBANY ACADEMY. Part II. Measured and Drawn by J. L. Dykeman and F. J. Ricker. Text by C. B. Gutler. Photographs by E. V. Rockwood		247
PAUL W. BARTLETT'S LATEST SCULPTURE		265
By John J. Klaber		
PORTFOLIO OF CURRENT ARCHITECTURE		279
THE ARCHITECT'S LIBRARY: Prof. Frothingham's New Volumes in Sturgis's History of Architecture. By Ralph Adams Gram		290
Books on Colonial Architecture. Part III. Dwellings (continued)		292
By Richard F. Bach		
NOTES AND COMMENTS		295

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DETAIL OF SERVICE WING—COUNTRY
HOUSE AT SOUTHAMPTON, L. I. GOODHUE
LIVINGSTON, ESQ., OWNER AND ARCHITECT.

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TWO COUNTRY HOUSES AT SOUTHAMPTON, L.I.



By



JOHN TAYLOR BOYD

IF a student of architecture should seek a district where he might gain a comprehensive idea of American house design he could hardly do better than to take the train to Southampton, Long Island. In this little town of Colonial ancestry the visitor would discover an epitome of American house architecture running back even to pre-Revolutionary times. Such early historic examples are, however, not very numerous in the district; there are scarcely any of the mansion type of dwelling, and only a few of the farmhouse type. What is most noteworthy in Southampton is the more recent development, beginning some thirty or forty years ago, when architecture was emerging from the blight of Victorian taste as it found expression in the work of commercial building firms.

Our visitor could not help being impressed with the progress made from this

transitional work to be the level reached at the present day, where technique, orderliness, and a real sense of form produce works such as the two houses designed by Mr. Goodhue Livingston and Mr. F. Burrall Hoffman, Jr., illustrated in these pages.

Luckily for Southampton, its development of country houses began with the arrival of the architect in American building, and consequently the architecture of the town is typically modern and on the whole successful. Beginning with this modern era, some twenty-five years ago, were built a number of large, roomy, single cottages of simple architectural elements and comfortable aspect. With big gable roofs and a very sparing use of simple Georgian detail, they were what might be called a cottage-by-the-sea type, and came from the hand of none other than Mr. Grosvenor Atterbury. From

that time to the present day one may find in Southampton a steady sequence of houses of the various types—formal, informal, Italian, English, Georgian, etc.—that are current in our house architecture. Mr. Atterbury figures often in this development. Following his first cottages, he designed a group of houses of the Spanish type, located west of the town of Shinnecock Hills. Here the architect fitted the dwellings into the rolls and hollows of the open moor, combining the irregular roofs with the silhouette of the terrain so admirably in the process that people have compared the result to the success attained by the Japanese in harmonizing buildings with their sites. This group of houses was completed some fifteen years ago, and marks an advance of the work of ten years earlier. Latest of all is Mr. Atterbury's recent art museum on the main street of Southampton, a distinctive brick structure, which brings up to date the record of steady progress in achievement during a generation accomplished by this particular architect.

But perhaps among all the houses of Southampton, the one best known to both layman and architect is the house of James L. Breese, designed by McKim,

Mead and White, some twelve years ago. Even today the beautiful lines and tall thin columns of this masterpiece are still reproduced from time to time in the pages of the various art magazines. In its mellow harmony it seems already ancient. Among the more recent houses and of a different type from the Breese house is the new villa of Mrs. H. H. Rogers, of which Walker and Gillette are the architects, which was described in the January issue of the Architectural Record.

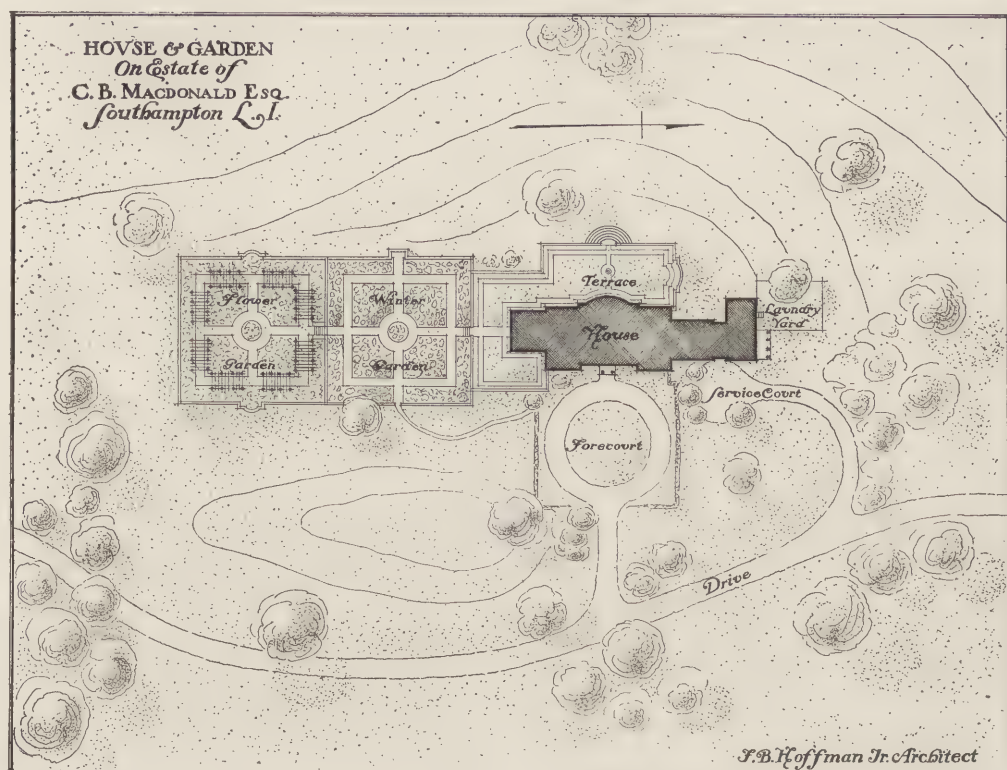
The two houses covered in this description—the house of Mr. Charles B. MacDonald, designed by Mr. F. Burrall Hoffman, Jr., and the house of Mr. Goodhue Livingston, designed by himself—mark the latest phases of Southampton architecture. The first is a distinctly English Georgian type, while the second represents a large, simple, straightforward sort of dwelling rather more American than anything else; differences of exterior treatment, be it said, for the plans follow the same scheme and the interiors have many points of resemblance.

Out in the country, some two miles to the northwest of the town, is the site of Mr. MacDonald's house, who is to be congratulated on controlling a situation of



FIRST AND SECOND FLOOR PLANS—COUNTRY HOUSE OF C. B. MACDONALD, ESQ.,
SOUTHAMPTON, L. I.

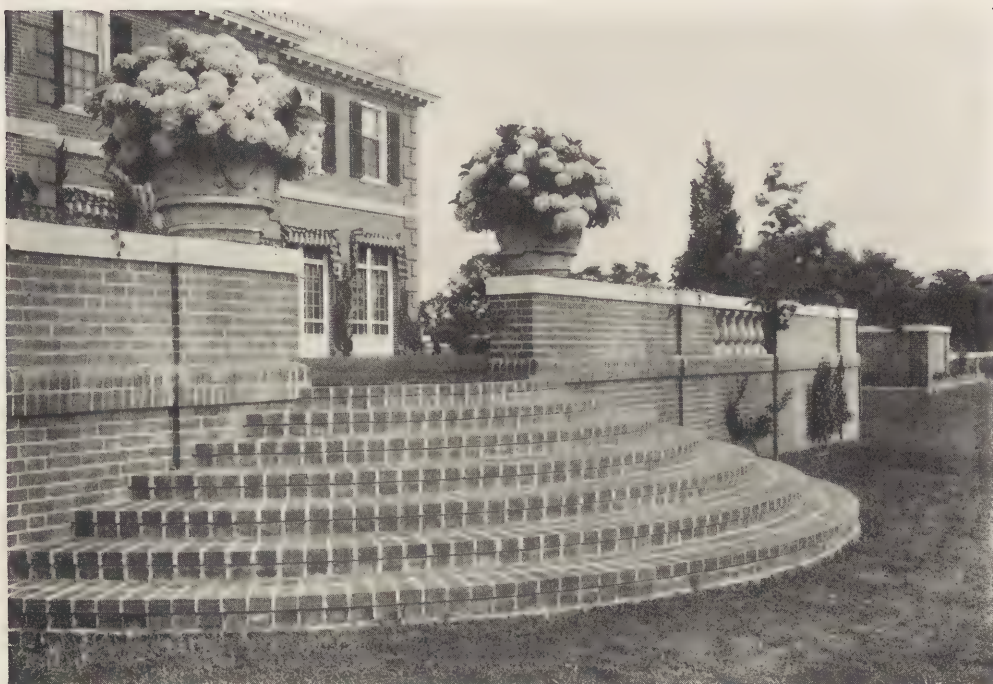
F. Burrall Hoffman, Jr., Architect.



such unusual natural beauty. His estate lies at the edge of a sheltered district of woods and old farms, which one traverses to arrive at the house where, entering on the east, and passing through the house to the brick terrace on the west, one comes upon an enchanting view of heaths and moors sloping down for a half mile to the waters of Peconic Bay where it makes in from Long Island Sound—a view stretching miles over the broad, dark-green moor and the sunlit waters, with scarcely a sign of human dwellings anywhere in sight. Mr. F. L. Olmsted, Jr., the landscape architect, is sensitive to the beauties of this Long Island landscape at Shinnecock Hills and along the shores of Peconic Bay. I recall his reference to it in his teaching as an excellent illustration of “scale” in landscape—how its delicate scale and fine proportions gave it a greater effect of size than it really possesses. On the vast plateaux of the Far West, he was wont to say humorously, he often failed to realize the true immensity of things because the details of the ter-

rain were themselves so colossal and stood out so clearly in the rarified atmosphere that they dwarfed everything, more especially the works of man. In such a landscape telegraph poles look like fence posts and steers appear the size of rabbits. But at Shinnecock, where distances are really short and the “hills” are called such by courtesy and because of a commendable feeling of local pride common in all communities—in spite of that, the delicate proportions of ground and growth and of the atmosphere invest the landscape with an air of vast range and size, making it extraordinarily impressive. And so, after wandering about these heaths until thoroughly under the spell of their magic deceit one may be suddenly alarmed at beholding, silhouetted against the horizon, a monstrous beast of undreamt size, which turns out to be merely a Long Island cow! Such is the illusion of the eastern Long Island landscape and one of the secrets of its attraction.

The situation of the Macdonald house takes full advantage of the landscape pos-



DETAIL OF TERRACE ON THE WEST-COUNTRY HOUSE OF C. B. MACDONALD, ESQ.,
SOUTHAMPTON, L. I.
F. Burrall Hoffman, Jr., Architect.

sibilities of the site. Situated just below the crest of the eminence where the fine dark roof of tall chimneys and small nestling dormers towers up against a background of trees, the house stands strongly and solidly, overlooking the slope to the water—formal, thoroughly suited to the scheme of things. Well conceived, too, are the formal gardens leading from the south end of the house, designed in the same broad scale, the work of Rose Standish Nichols of Boston. They comprise two large squares, with a few feet difference of level between and a pergola in the lower square, and serve admirably to tie the house into its setting.

The exterior of the house shows a sure handling of proportions and details, at once comfortable and homelike, carried out consistently in English Georgian motives, with a fine effect of style. This solidity and air of comfort is apparent throughout the place, inside as well as outside, and as a result the English Georgian motives are free from any air of stiffness and sophistication, which would

be thoroughly out of place in a country house in the wild Shinnecock landscape. Another feature of the exterior is the large segmental bay on the first floor of the west front overlooking the view, a skillful touch of planning to make full use of the view over the moors and at the same time provide a more interesting library inside. The details of the exterior are ably executed in a local hard-pressed brick of pinkish tone, with wood cornice and Indiana limestone, and with the characteristic Georgian elements of wide window casings and heavy muntins.

Inside the house the plan is symmetrical, easily and spaciouly arranged, affording rooms that are decorated in a restrained, quiet good taste. The photograph on page 202 shows the well proportioned formal entrance hall, all in white, with floor of black and white marble squares and walls relieved by Ionic pilasters. It is interesting to note the furniture, how well it is chosen, just enough of it to avoid bareness. At one end of the hall is the main staircase of



WEST FRONT-COUNTRY HOUSE OF C. B. MACDONALD, ESQ.,
SOUTHAMPTON, L. I. F. BURRALL HOFFMAN, JR., ARCHITECT.



ENTRANCE HALL AND STAIRS—COUNTRY HOUSE
OF C. B. MACDONALD, ESQ., SOUTHAMPTON, L. I.
F. BURRALL HOFFMAN, JR., ARCHITECT.



LIBRARY—COUNTRY HOUSE OF C. B. MACDONALD, ESQ.,
SOUTHAMPTON, L. I. F. BURRALL HOFFMAN, JR., ARCHITECT.



DINING ROOM—COUNTRY HOUSE OF C. B. MACDONALD, ESQ.,
SOUTHAMPTON, L. I. F. BURRALL HOFFMAN, JR., ARCHITECT.



VISTA ALONG MAIN AXIS OF GARDEN—COUNTRY HOUSE OF C. B. MACDONALD, ESQ.,
SOUTHAMPTON, L. I.
F. Burrall Hoffman, Jr., Architect.



LOWER LEVEL OF GARDEN—COUNTRY HOUSE OF C. B. MACDONALD, ESQ.,
SOUTHAMPTON, L. I.
F. Burrall Hoffman, Jr., Architect.

marble treads and wrought iron railing, ascending to the second floor in a stair hall of white Caen stone effect. Two features of the plan are worthy of mention: a convenient little ladies' room and a small golf room opening off the hall beyond the main stairs.

Taking up the more important rooms of the house, the dining room treatment is well shown in the photograph on page 204. The white plaster enframements for the family portraits, are the most noteworthy features of this room, which is finished in a cream color that is almost a shade of tan. I have mentioned the strategic position of the library with its bay window commanding the view—a large room, with bookcases and panels in oak to the ceiling, and a great fireplace. Delightful, also, is the large drawing room which opens off the end of the hall. In this room Mr. Hoffman has carefully maintained the 18th Century English character of the house in the big raised panels of solid mouldings in which the face of the panels projects beyond the stiles. All this woodwork in the drawing room is executed in birchwood with a finish resembling somewhat that of oak. Off the drawing room opens a sun room overlooking the gardens to the south, its little niche set against the drawing room fireplace in the thickness of the chimney breast.

The second floor of the house is given over to six bedrooms and a very homelike boudoir, which with two bedrooms forms a suite facing south for Mr. and Mrs. Macdonald. Each bedroom is decorated with a chair rail and strip panels above. Mr. Hoffman uses very broad stiles in his strip paneling, nearly eight inches wide in fact, obtaining thus a broad, almost naive, result that adds greatly to the homelike appearance of the rooms. Another feature of the bedrooms (in occasional use elsewhere) is the slat doors opening off the hall like those in steamship rooms. These are hung outside the usual solid door and add greatly to the comfort of the house in summer; nor do they detract one whit from the appearance of the hall.

The second floor of the service wing is well planned to provide three maids'

rooms and a sewing room, good space for linen and hanging closets, besides a stairway in the master's portion of the residence to the maids' rooms on the third floor. Altogether, the house is ably designed and skilfully executed, a worthy feature of a remarkable landscape.

The second house is the summer residence of Mr. Goodhue Livingston, the architect, who in partnership with Mr. Trowbridge under the firm name of Trowbridge and Livingston, is well known for his work in monumental architecture, notably the thirty-story Bankers' Trust Company building at No. 16 Wall Street, New York City, and the new offices of J. P. Morgan & Co., opposite. Something of the monumental character may be discovered in Mr. Livingston's own house—in its dignified, substantial and spacious proportions, which are nevertheless free from stiffness or artificiality. Comfortable in its exterior aspect, it is no less homelike inside. The design shows nothing eccentric, a fact which seems to violate the tradition that when an architect sets himself to plan his own home he will develop something odd or curious, merely as a reaction from the restraints imposed on him by his clients. After all, the site of Mr. Livingston's house does not call for any phantasy of design. The house faces on a large placid pond or midget lake, whichever you wish, that lies between the center of Southampton town and the bathing beach. Along the flat, slightly rising shores of the pond are a number of houses, having rear entrances on a road encircling the pond about a furlong back from the water—altogether an informal effect of level greensward shores and large houses set out against a background of high trees.

If one keeps this idea of site in mind, he will realize how effective Mr. Livingston's work is; how well the architect has schemed it in its setting. In these days when individuals vie with each other in aggressive display, it is gratifying to find such an expression of neighborliness and good manners in house design as Mr. Livingston has shown us here. Perhaps this is where, after all, Mr. Livingston has done the



FRONT ELEVATION—HOUSE AT SOUTHAMPTON,
L. I. GOODHUE LIVINGSTON, ESQ. (OF TROW-
BRIDGE & LIVINGSTON), OWNER AND ARCHITECT.



HALLWAY—COUNTRY HOUSE AT SOUTHAMPTON, L. I.
GOODHUE LIVINGSTON, ESQ., OWNER AND ARCHITECT.



LIVING ROOM—COUNTRY HOUSE AT SOUTHAMPTON, L. I.
GOODHUE LIVINGSTON, ESQ., OWNER AND ARCHITECT.



DETAIL IN LIVING ROOM—COUNTRY HOUSE
AT SOUTHAMPTON, L. I. GOODHUE
LIVINGSTON, ESQ., OWNER AND ARCHITECT.

eccentric thing in reaction from the conventional ideas of clients, for although the most discerning people avoid aggressive effects it would not be difficult to find communities where unobtrusive architecture is abnormal.

When seen from the southeast, the house stands out well on a slight projection of the shore, a fine gray mass of shingle walls and high roof slope outlined against the trees, relieved by the white twin porches and blue window blinds. Especially successful is the low service wing that has all the cosy proportion and perfect scale of an old farmhouse ell in the early Dutch settlements of New Jersey.

On entering the house, a light, cheerful, spacious summer home is revealed to the visitor. The plan unfolds easily in most experienced fashion, as might be expected from the skilled hand of its designer. Taking only one instance of good arrangement, the stairway opens off the main hall apart from the entrance—the correct place for it if the space can be afforded. Too often do we see the stairs made the most prominent feature of the entrance, so placed that they appear to beckon each visitor up into the most private portions of the dwelling. Such planning is a thoughtless imitation of the monumental stair-flights of public buildings where people are allowed free access to all floors. Incidentally this stairway of Mr. Livingston's is a very graceful bit of detailing of mahogany rail without newels, and of delicate scroll ornaments on the strings under each tread.

The most striking feature of the whole house is the unusual consistency of its interior. Practically all the rooms and the hallways upstairs and down have a uniform treatment of light, almost white, walls, decorated with strip panels, and a

delicate, well proportioned, plaster cornice at the ceiling. However formal this scheme may seem, it cannot be said to be heavy or artificial, as a glance at the photographs accompanying this article will show. The easy, comfortable, cheerful effect is emphasized in them, an effect admirably aided by the spare use of very well chosen furniture in which the formal characteristic is not overdone. In this respect of good furniture carefully and sparsely chosen to accord with the architectural design, each of the houses treated in these pages is noteworthy. Indeed, it seems as if neither architecture nor furniture had precedence one over the other in a relationship of master to servant, but dwelt instead equals in a happy union—a marriage of design.

Exceptions to this rule of uniform treatment are the library and small study on the ground floor, of which the former is an English room with strapwork plaster ceiling and paneled wainscot and bookcases, some two-thirds the height of the walls; and the latter a simple room finished in dark green.

Upstairs the bedrooms open from both sides of an ample hallway. Decorated with the same scheme of strip panels and chair rail mentioned, each is finished in various shades of extremely light gray, with furniture painted in the same general tone of the walls. The floors are light wood and covered by a single big thick rug, without border or pattern, of one deep shade of rose or green or blue, all enhancing the summery effect of the rooms.

Simply wrought as Mr. Livingston's house is, its very unobtrusiveness is the result of extreme care, accuracy and good taste in both house and furnishings. The more it is studied, the better will its success be appreciated.



LIVING ROOM BAY—HOUSE AT CYNWYD,
PA. MELLOR & MEIGS, ARCHITECTS.



·EXAMPLES·OF· ·THE·WORK·OF· MELLOR·&·MEIGS

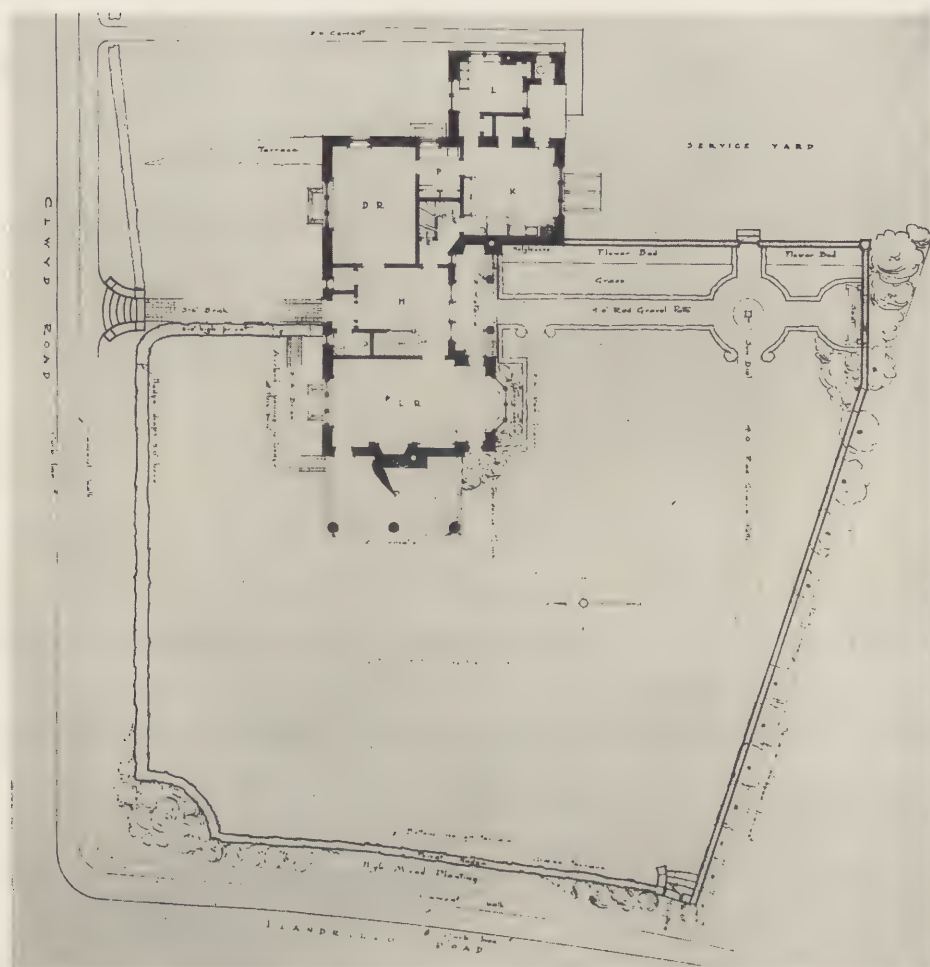
By

HAROLD·D·EBERLEIN

INFORMAL, comfortable, well mannered, interesting, sincere. These five adjectives in related succession might appropriately be used in describing the work, at least the domestic work, of Mellor and Meigs, architects, of Philadelphia, if anyone were asked to epitomise the characteristics of their style in the most succinct form possible. Their interpretation of domestic architecture, while chiefly informal, is always decorous and well considered. The houses they have built are comfortable and practically livable and look the part. Their style is well mannered, as indeed it must needs be if the informal quality is to be sustained with fitting decorum, but well mannered without being devoid of vigor. It is interesting because it bears the stamp of a sane, balanced individuality, an individuality that does not verge upon "stuntiness," as architectural individuality un-

fortunately often does. In their more formal houses and in the buildings they have designed for clubs, the agreeable qualities of comfort, poise and interest are sustained. Furthermore, their work is catholic in scope, for they have shown an equal command of resources whether designing dwellings, club houses, farm buildings, garden houses, furniture or in plotting and executing gardens because they have interpreted with sincerity and freedom the needs of each occasion. In all their performances one can trace the blessed leaven of common sense. But the enumeration of generalities is not conducive to clear ideas, so let us turn forthwith to an examination of the structures illustrated, and see whether the individual examples do not bear out the characterization just noted.

First in order comes the house at Cynwyd, Pennsylvania. One sees with satis-



GARDEN AND GROUND FLOOR PLAN—HOUSE AT CYNWYD, PA.
Mellor & Meigs, Architects.

faction that the architects have preserved a virtually uninterrupted expanse of roof, notwithstanding the frequently insistent demand for numerous dormers that break up the sky line, destroy the repose of the roof and often fail to realize more than a modicum of the utility they are popularly supposed to achieve in making a third floor capacious, light and airy. There is, of course, nothing inherently bad about a dormer in itself. The mischief is in the way it is used, or perhaps we had better say, abused. The single small dormer visible from the garden front is so unobtrusive in proportion and construction that little exception can be taken to its presence even by the strictest

stickler for long sweeps of unpierced roof. The unbalanced disposition of gables of unequal height and unequal projection imparts an agreeable note of diversity to the mass quite compatible with the informal character of the work.

In their use of materials, Mellor and Meigs are singularly fortunate. They have adhered, in great measure, to an expression in vernacular resources and methods without, however, being slavishly subservient to tradition. The stonework in the Cynwyd and St. Davids houses is laid with material from nearby quarries and its manner of laying is, for the most part, the manner practiced by the original Welsh and English settlers and



GARDEN ELEVATION—HOUSE AT CYNWYD, PA.
Mellor & Meigs, Architects.



GARDEN SIDE—HOUSE AT CYNWYD, PA.
Mellor & Meigs, Architects.

handed down by generations of local masons in the neighborhood of Philadelphia. It is this masonry tradition that has made the stonework of the Philadelphia neighborhood so justly famous. In the matter of style, the modern English mode with its occasional touch of Norman austerity, of which Mr. Lutyens is so capable an exponent, has no traditional precedent, but in a place so steeped in tradition as Philadelphia and the surrounding country, it is rather refreshing once in a while to get away from tradition. The plaster in the peak of the end gable of the Cynwyd house makes a pleasing point of variant interest and is happily introduced just at the line where the broach of the chimney begins to sheer off to the stack of brick flues which are themselves of a design worth noting. The same touch of plaster work is agreeably echoed in the small gable above the living room bay. The half timber work on the garden front of the house, introduced as a treatment for a frame wall made necessary by the overhang, and which would have been spotty had it been left plain, affords an amusing bit of contrast in the handling of materials and is echoed, in bolder form, in the service wing gable where the intervening spaces between the timbers are filled with brick laid herring-bonewise instead of with stucco. Being intended for occupancy by a small family of modest means, the Cynwyd house is simple and unpretentious in plan.

The house at St. Davids possesses a large share of individual interest in its own architectural right and, besides that, it deserves special attention, because in its design and construction the architects have judiciously overridden certain fancied conventions which, though not universally applicable nor invariably supported by reason, have been wont to exert too strong an influence upon the public mind in its estimation of architectural convenience and propriety. They have backed the house squarely to its approach, a performance contrary to the ordinary precedent established on the theory that such a practice might prejudice the sale of adjoining properties; they have left an unbroken roof and, last of all, they have left off porches, or at

least porches in the usually accepted significance of the term. In all of these things they have shown a healthy virility of conception and a wide awake perception of the real requirements and opportunities in the conditions presented for treatment. Quite apart from all other considerations, the St. Davids house shows an exceptionally happy and successful solution of the problem of the small country house erected on a site of limited extent. The whole lot comprises exactly one-third of an acre.

The apportionment of the ground space is well balanced and falls into the three natural divisions of forecourt, service yard and the area covered by the house with its garden. It was the part of common sense to back the house to its approach and face its more genial aspect, with the garden and the view from the principal rooms, towards the southeast, looking over the golf links towards which the ground slopes and where the prospect is the most pleasing. By doing this an exposure was gained that is about as near the ideal for a country house exposure as one can find. In the morning all the living rooms have an abundance of sunlight while by four o'clock in the afternoon, or a little after, the sun has gone far enough to the north of west for the house to cast a shadow and make the terrace a pleasant and sheltered place to sit. The slope of the hill has been properly recognized and both the house and the garden have been accordingly planned to follow the contour of the ground without any artificial modifications so that one drops down both inside the house and out.

The plan of the house is especially worthy of close scrutiny. There is an altogether too common disposition to believe that a small and inexpensive house, in order to ensure the maximum of comfort, convenience and economy in space at a minimum of outlay, must be made a square, three-story box-like structure. The St. Davids house is a refutation of that theory as a piece of unalterable necessity. It is a minimum sized house, kept down to what is ordinarily contained in a like sized three-story, square, box-like dwelling of the type just alluded to,



ENTRANCE ANGLE—HOUSE OF LEONARD T. BEALE, ESQ.,
ST. DAVIDS, PA. MELLOR & MEIGS, ARCHITECTS.



SOUTHEAST TERRACE—HOUSE OF LEONARD T. BEALE, ESQ., ST. DAVIDS, PA.
Mellor & Meigs, Architects.

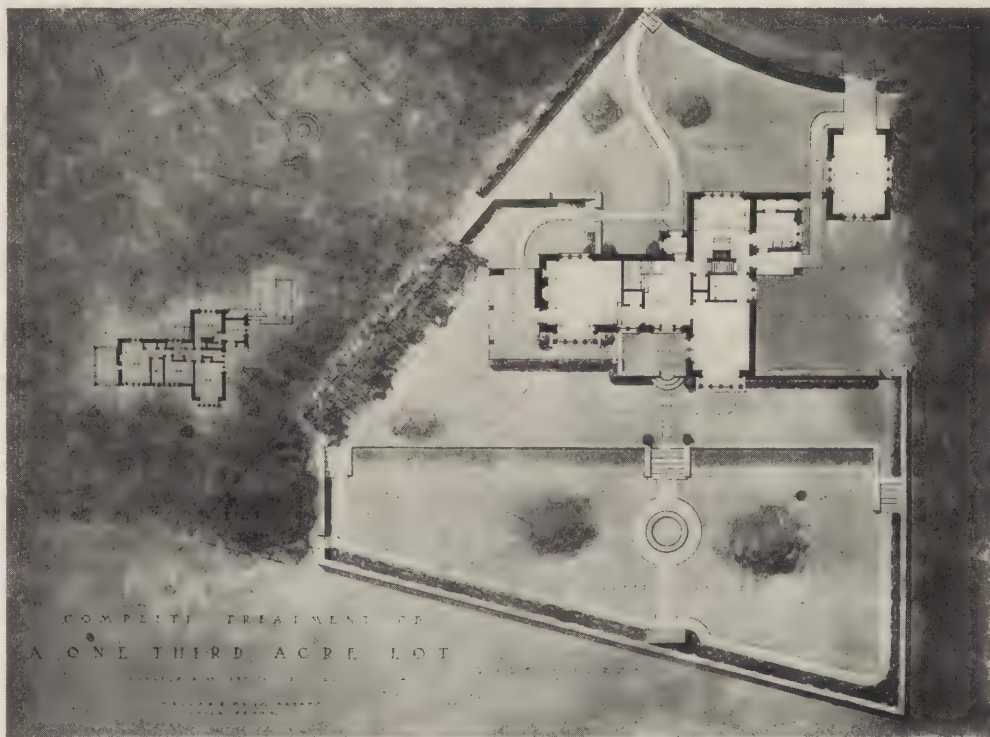
only it is built long instead of high, with the rooms closely packed together. And yet the St. Davids house is essentially an inexpensive house. Its cost was nearly the same as that of a square, three-storied house of like capacity. On the ground floor it contains, at the southwest end, an isolated living room opening into the central hall on the other side of which is the dining room with the kitchen, pantry and laundry beyond. Above-stairs there are three master's bedrooms, two baths and two servants' rooms. An examination of the plans will show that the family's living rooms and bedrooms have a southeasterly and southwesterly exposure, while the kitchen and the servants' rooms are towards the north and railroad, thus giving the best exposure and the most agreeable outlook to the family, while the less desirable is left for the domestics. It is only a two-servant house and yet it is complete in every essential provision for domestic comfort but it does not attempt to provide more than is absolutely necessary. In this particular it might be regarded as a whole-

some rebuke to the present tendency of the small house builder to reach out for too much and demand a vainglorious house containing all the features of a big country estate instead of being satisfied with simplicity and a comfortable sufficiency. In regard to the outside arrangement of the buildings, one of the best features of the plan is the placing of the garage forward to the north at one side of the forecourt, so that it forms a part of the enclosure for the kitchen garth without necessitating an artificial screen.

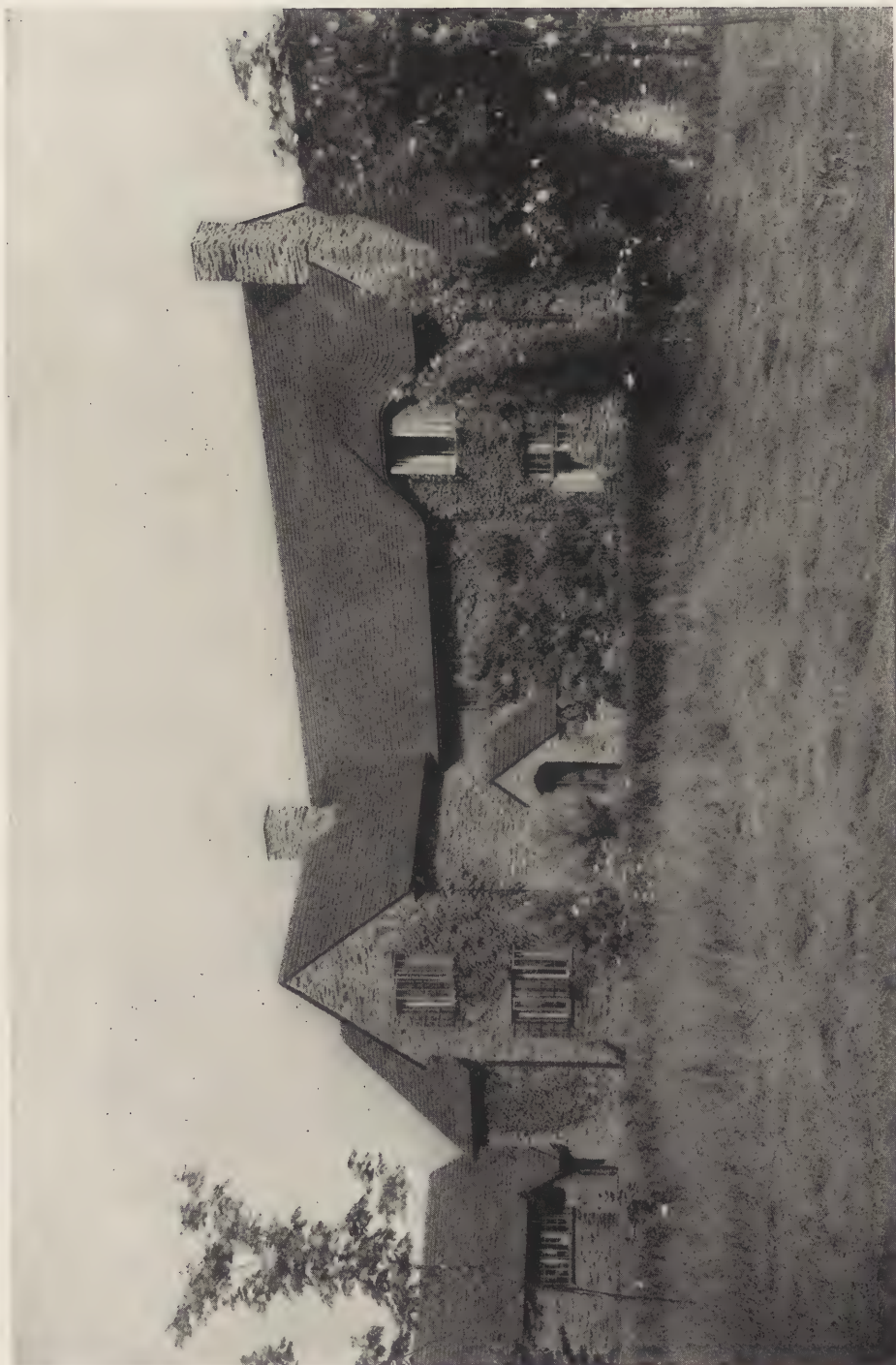
The gabled stone entrance porch for the protection of those entering the house door in inclement weather and the terrace on the southeast front of the house, overlooking the garden and golf links, answer all the purposes of utility and comfort that are commonly supposed to be fulfilled by porches of the usual type and none of the ground floor rooms have their light interfered with. The solution is eminently sensible. If there is really a reason for having a porch, by all means have one, but when its functions can be fulfilled by other legitimate means,



GARDEN SIDE—HOUSE OF LEONARD T. BEALE, ESQ., ST. DAVIDS, PA.
Mellor & Meigs, Architects.



GARDEN AND GROUND FLOOR PLAN—HOUSE OF LEONARD T. BEALE, ESQ., ST. DAVIDS, PA.
Mellor & Meigs, Architects.



ENTRANCE ELEVATION—HOUSE OF LEONARD T. BEALE,
ESQ., ST. DAVIDS, PA. MELLOR & MEIGS, ARCHITECTS.



FORECOURT—HOUSE OF LEONARD T. BEALE, ESQ., ST. DAVIDS, PA.
Mellor & Meigs, Architects.



LIVING ROOM—HOUSE OF LEONARD T. BEALE, ESQ., ST. DAVIDS, PA.
Mellor & Meigs, Architects.



HOUSE DOOR—HOUSE OF MRS. WILLIAM J. WILLCOX,
ST. DAVIDS, PA. MELLOR & MEIGS, ARCHITECTS.



SOUTH FRONT—HOUSE OF MRS. WILLIAM J. WILLCOX, ST. DAVIDS, PA.
Mellor & Meigs, Architects.



LIVING ROOM—HOUSE OF MRS. WILLIAM J. WILLCOX, ST. DAVIDS, PA.
Mellor & Meigs, Architects.



GARDEN FRONT—HOUSE OF DR. FRANCIS W. MURRAY, SOUTH
ASHFIELD, MASS. MELLOR & MEIGS, ARCHITECTS.



DINING ROOM INGLE SEATS AND FIREPLACE—HOUSE OF DR. FRANCIS W. MURRAY,
SOUTH ASHFIELD, MASS.
Mellor & Meigs, Architects.



MUSIC ROOM FIREPLACE—HOUSE OF DR. FRANCIS W. MURRAY, SOUTH ASHFIELD, MASS.
Mellor & Meigs, Architects.



DETAIL OF STAIRWAY—GARDEN BUILDING
FOR CHARLES BIDDLE, ESQ., ANDALUSIA,
PA. MELLOR & MEIGS, ARCHITECTS.



ESPALIERED WALL—GARDEN BUILDINGS
FOR CHARLES BIDDLE, ESQ., ANDALUSIA,
PA. MELLOR & MEIGS, ARCHITECTS.



FROM THE GARDEN—GARDEN BUILDINGS
FOR CHARLES BIDDLE, ESQ., ANDALUSIA,
PA. MELLOR & MEIGS, ARCHITECTS.



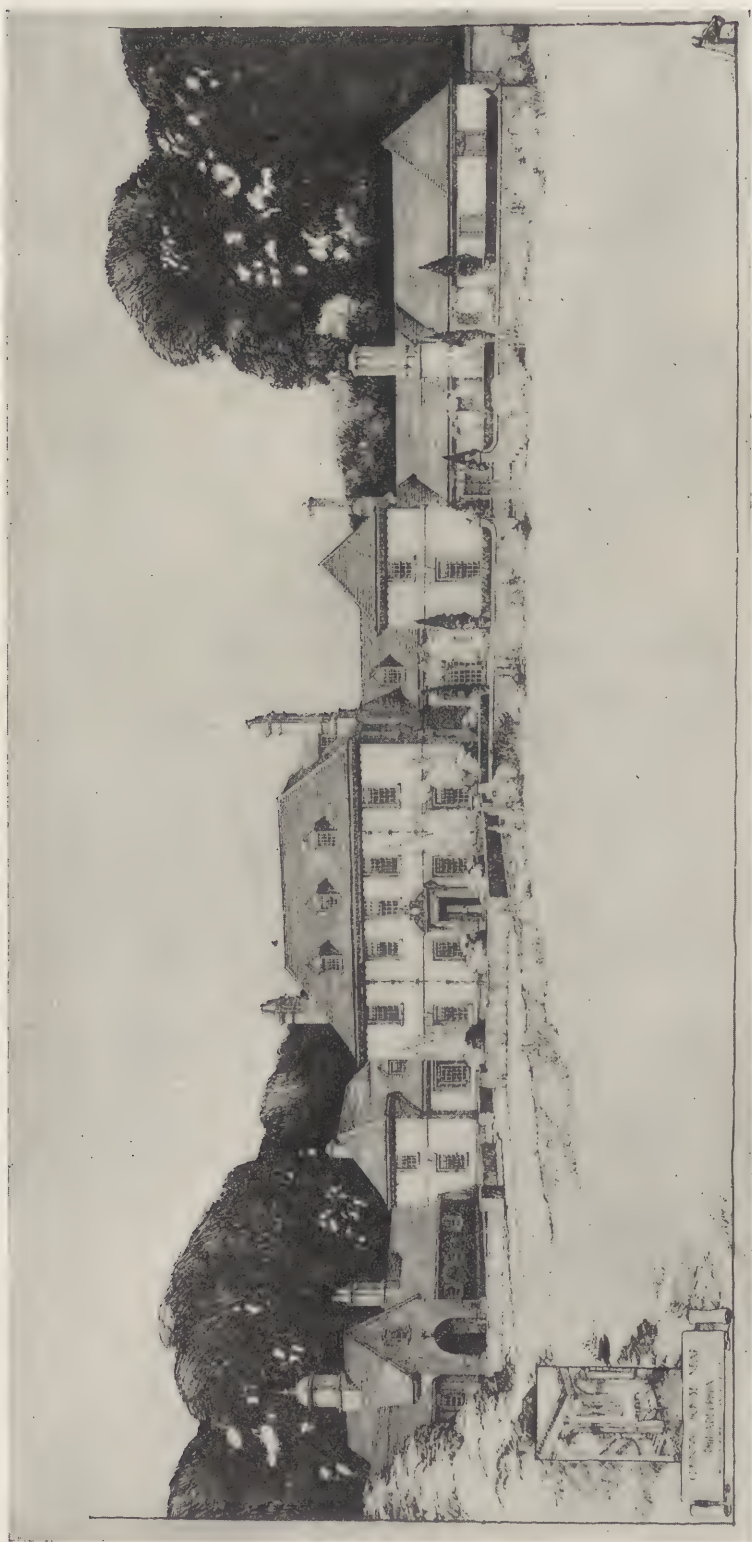
HOUSE OF E. F. BEALE, ESQ., STRAFFORD,
PA. MELLOR & MEIGS, ARCHITECTS.



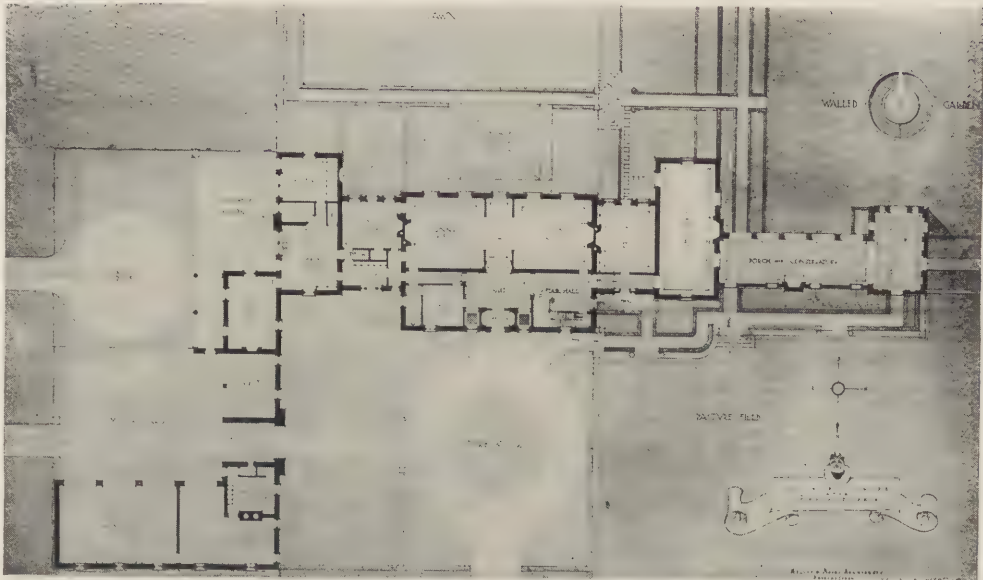
HOUSE DOOR DETAIL—HOUSE OF E. F. BEALE, ESQ.,
STRAFFORD, PA. MELLOR & MEIGS, ARCHITECTS.



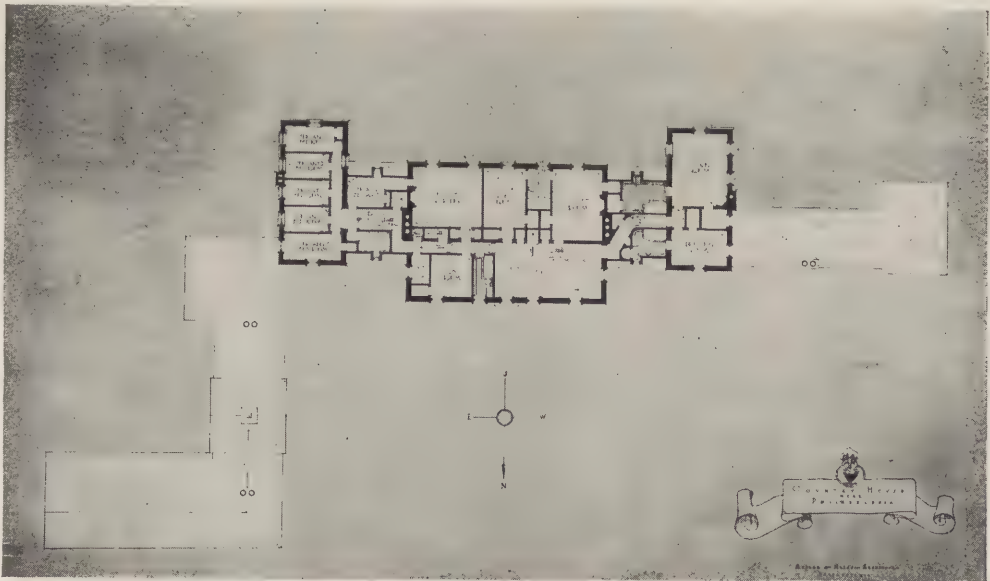
RENDERING-HOUSE OF CASPAR WISTER MORRIS, ESQ.,
HAVERFORD, PA. MELLOR & MEIGS, ARCHITECTS.



RENDERING—COUNTRY HOUSE NEAR PHILA-
DELPHIA. MELLOR & MEIGS, ARCHITECTS.



GROUND FLOOR PLAN—COUNTRY HOUSE NEAR PHILADELPHIA.
Mellor & Meigs, Architects.



SECOND FLOOR PLAN—COUNTRY HOUSE NEAR PHILADELPHIA.
Mellor & Meigs, Architects.



BARN AND POLO STABLES FOR A. J. DREXEL PAUL, ESQ., RADNOR, PA.
Mellor & Meigs, Architects.



BARN AND POLO STABLES FOR A. J. DREXEL PAUL, ESQ., RADNOR, PA.
Mellor & Meigs, Architects.



STREET FRONT—PRINCETON-CHARTER CLUB,
PRINCETON, N. J. MELLOR & MEIGS, ARCHITECTS.



ENTRANCE DETAIL—PRINCETON CHARTER CLUB.
PRINCETON, N. J. MELLOR & MEIGS, ARCHITECTS.



FRONT TERRACE—PRINCETON CHARTER CLUB,
PRINCETON, N. J. MELLOR & MEIGS, ARCHITECTS.



SOUTH FRONT—PHI GAMMA DELTA
FRATERNITY HOUSE, PHILADELPHIA.
MELLOR & MEIGS, ARCHITECTS.



ENTRANCE DETAIL—PHI GAMMA DELTA FRATERNITY HOUSE, PHILADELPHIA. MELLOR & MEIGS, ARCHITECTS.

the gain in light for the ground floor rooms and the agreeable lines of the mass are the predominant considerations. When there is an unquestionable use for a porch in a logical place, no really valid objection exists to making one. There is no denying, however, that a good deal of our suburban and rural domestic architecture has suffered from a multiplicity of porches tacked on in a perfunctory, matter of course manner, apparently without first stopping to ask whether they were actually needed, whether they would be used after they were built and whether their purpose could not have been as well or better fulfilled by some other means, perhaps by a paved terrace, or by a detached pergola or garden house.

The aspect of vigorous, austere simplicity, quite Norman in character, especially on the entrance side, is one of the most agreeable features of the house, an aspect to which the absence of projecting eaves or barges at the gables, the long unbroken wall spaces and the almost severe setting of the casement windows counted in no small degree. The second story window, bending the eaves to allow for its introduction and visible from the approach, is treated in a manner characteristic of South of England architecture, and serves to enhance the repose of the roof contour rather than to disturb its tranquillity. All things considered from the points of view of both plan and design, the St. Davids house may be regarded as a particularly successful treatment of a small country place. It is also manifest that its execution exhibits a medium of expression in which the architects have been exceptionally felicitous in the matter of sympathetic interpretation.

While the Willcox house, following the two former examples in sequence of illustration, presents points of merit, it can scarcely be said to show the same freshness and spontaneity of conception or the same vigor of treatment as the dwellings already discussed. Indeed, it appears to be a house designed without enthusiasm and perhaps "forced" by the client. Its style is much more matter of fact in tone and leaves not the same lee-

way and invitation for engaging touches of originality. The windows are too many and too large and the consequent lack of wall space gives it an air of restlessness. The house door affords an interesting example of a successful combination of Queen Anne and late Georgian inspiration and is both distinctive and pleasing. One cannot help feeling, however, that it would have gained considerably in strength and character if the bracket-like bit of trellis above it were either removed or set farther away.

As a consistent example of restoration and addition in close conformity with local precedent, the house of Dr. F. W. Murray, at South Ashfield, Massachusetts, commands attention. The exterior represents an extension of the original structure carried out in the characteristic New England clapboard style with merely the addition of a great cobble chimney stack in an angle of the walls that echoes the field stone walls of the garden. The wisdom of not attempting to add any extraneous modern frills to a severely simple old body is apparent. The two interior views showing fireplace treatment are particularly interesting. The addition of an inglenestle beside the dining room fireplace calls attention to the architect's province as a designer of furniture, a branch of architectural activity in which they have been notably successful and of which something further will be said in a subsequent paragraph. Meanwhile, it may be observed that the nestle is of excellent design, thoroughly in keeping with its surroundings and altogether constitutes a wholesome example of adding new features to old in a consistent spirit. The unusually high opening of the music room fireplace throws into strong contrast the low ceiling, and produces an interesting "jump" in scale which, if successful, is always agreeable.

As a piece of reconstruction and addition to what was an unpromising nucleus to start with, the garden house at Andalusia well merits genuine admiration. A fire had left what was formerly a carriage and tool house, with a tank tower at one end, in ruins, and the object of the owner was to build again in the cor-



HALL-PHI GAMMA DELTA FRATERNITY HOUSE,
PHILADELPHIA. MELLOR & MEIGS, ARCHITECTS.

ner of his garden a high accent, which would replace the old tank, and serve any particular function which his fancy might dictate. In the event of rebuilding and remodelling it was a case where too much addition, too much elaboration, too much introduction of new or ambitious features would have been out of harmony with the rest of the environment. As in most ancient gardens, there were traditions to be preserved and respected. The architects have done just enough and then stopped, with the fortunate result that the rebuilding of the old and the addition of the new are harmoniously blended. Furthermore, the whole composition is eminently in keeping with the unpretentious but dignified garden arrangement, in a style that obtained more than a century ago, with box-edged paths and great luxuriant masses of bloom. Somehow one cannot quite get away from the feeling of being suddenly set down in the garden of one of the lesser old manor houses of France. The general tone of the treatment is thoroughly Latin in character; the severely plain rectangular openings, with their simple iron balustrades, in the upper part of the tower, its pyramidal roof and the conical roof of the "gazebo" at the top of the stair, the absence of heavy cornice or projecting eaves and the casement windows set back with deep reveals are all reminiscent of what one may see in certain parts of the South of Europe. The garden house at Andalusia is further interesting as an instance of the thrifty using up of materials already on the ground. In lieu of limestone for the reveals of the openings of the upper story in the tank tower, concrete blocks were cast on the spot. The iron balcony rails at these same openings were also set in projecting concrete sills moulded *in situ*. The brick course just below the cornice, which is reduced to a minimum, gives a pleasant note of diversity and represents the employment of some more old material lying ready at hand. The turret-like projection approached by the stair is really at the angle of two walls and serves a double purpose in that it provides a buttress and also agreeably

diversifies the lines of the structure, incidentally affording a point of vantage for viewing the garden. Altogether, the work is a pleasant treatment of a pleasant subject.

The house of E. F. Beale, Esq., at Strafford, Pennsylvania, furnishes an example of rigorous restraint. Barring the concentrated and somewhat ponderous ornamentation of the entrance and the balcony above it, enclosed with an interesting bit of ironwork, the building is wholly devoid of any architectural pretension. As regards plan and execution, it is the exact antithesis of the St. Davids house in that it represents the compact, square box type, logically and frankly carried out. It has an aspect of staunch, four-square honesty about it and presents a generous breadth of scale. Despite its exceeding plainness, the agreeable amplitude of its proportions imparts a presence that cannot be ignored.

By way of sharp contrast to the Strafford house, we come next to that designed for Caspar Wister Morris, Esq., a contrast that testifies to flexibility of conception and execution. As the reader may readily see by the pen and ink rendering, the architects have contrived to combine interest of texture, mass and fenestration. There is abundant variety in the disposition of masses and the contour of the roof line, while sufficiently varied, is neither uneasy nor captious. One may say that the mass builds up to a climax and then quiets down again, a characteristic that usually tends to cement a house to its setting in a very satisfactory manner. The general aspect is one of unpretentious dignity and simplicity and, withal, of solid domestic comfort, and yet richness of detail is not lacking where there is occasion for it. Thanks to the flexibility of the architectural mode chosen, there are numerous opportunities to place accent where it is desirable or to suppress that which would seem too prominent were an absolutely uniform method of dealing with them adopted, as, for instance, in the treatment of the windows and their trims. In one place we find attention directed to a window by its brick trims, in another that is less



DINING ROOM—PHI GAMMA DELTA
FRATERNITY HOUSE, PHILADELPHIA.
MELLOR & MEIGS, ARCHITECTS.



REAR VIEW—PICKERING HUNT CLUB, PHOENIXVILLE, PA.
Mellor & Meigs, Architects.



ENTRANCE ELEVATION—PICKERING HUNT CLUB, PHOENIXVILLE, PA.
Mellor & Meigs, Architects.



SOUTH TERRACE—PICKERING HUNT CLUB, PHOENIX-
VILLE, PA. MELLOR & MEIGS, ARCHITECTS.

important the casement frame is set in an inconspicuous wood frame into the masonry without any emphasizing decorative feature. The Morris house may be regarded, in short, as an embodiment of the principles of design for which the architects stand and in which they often find their happiest form of expression.

No less scholarly and virile in treatment, though distinctly different in style, is the Queen Anne-Early Georgian house, near Philadelphia, shown in a subsequent rendering. Here again we find the mass building up to a climax, starting with the low flanking buildings on one side, rising to the greatest height at the central portion of the house proper and then subsiding by due gradation on the other side. The whole arrangement of masses is broad and striking. The plans of this house, following the rendering, almost speak for themselves and require but little additional comment. One feature, however, it is especially important to note and that is the way in which a porch has been provided, incorporating it as an integral part of the plan and enhancing the composition of the whole mass. It will be seen that the long wing at the right is in reality a wall whose doors and windows are filled with iron grilles—in winter glass sashes may also be added—and that on the other side of the wall, instead of a succession of rooms, there is an open colonnade or porch looking out southward over the garden. This arrangement and exposure make the porch a feature of all the year round utility. Another interesting point of the plan is that there is provided a day nursery on the ground floor in close proximity to the back stairs and the servants' wing so that the children may be close to the ground and go in and out without coming into other parts of the house when it is desirable that they should do so.

The barn and polo stables on the estate of A. J. Drexel Paul, Esq., evidence another point in the catholicity of the practice of the architects whose work is under consideration and stand as a protest against the tendency to credit one

architectural firm with the ability to do only one special thing well, whether it be houses of a particular type, churches, banks or farm buildings.

As representative examples of club and fraternity house treatment illustrations are given of the Princeton Charter Club, at Princeton, New Jersey, and of the Phi Gamma Delta Fraternity House, of the University of Pennsylvania, in West Philadelphia. The former is a composition of breadth and dignity and of striking interest in its detail as exemplified in the accompanying cuts. It is also conspicuous for its just proportions, poise and purity of style. The Phi Gamma Delta Fraternity House, in a wholly different vein, is equally pleasing. The illustrations will speak sufficiently for its general and more obvious features, but special attention should be directed to several items that are thoroughly characteristic of the work of Mellor and Meigs. In the first place, in the treatment of all details such as mouldings, decorative ironwork, hardware, interior woodwork and the like, they habitually display the most painstaking care with the result that all these features manifest an exceptional combination of both refinement and vigor as well as sound design.

In the second place attention should be called to the fact that Mellor and Meigs not infrequently design certain pieces of furniture for buildings they have erected, thus emulating the practice of the Georgian architects, whose efforts in this direction had such a marked effect upon the development of the mobiliary art in England of the eighteenth century. All of the furniture in the dining room and some of the furniture elsewhere in the Phi Gamma Delta Fraternity House was designed by the architects and their achievement in this field has been notably successful. In their solicitude for honest craftsmanship, the honest use of materials and the proper furnishing of their interiors Mellor and Meigs have set their faces in the right direction and taken a step forward in the progress of American architecture.

Albany Academy

*Measured and Drawn by
J. L. Dykeman and F. J. Ricker*

Text by C. B. Cutler. Photographs by E. V. Rockwood

Part II.

THE life of Philip Hooker has left no record other than that indicated in his work. What manner of man he was we may not know beyond such inference as is to be drawn from this material expression. A careful study of the Academy building in detail shows a painstaking that closely approaches genius. Nothing seems to have been too small for consideration.

What Hooker's inspiration may have been it is not easy to guess. The exterior certainly has more of the French than English in flavor, but French taste was probably influential at that time, only as it may have been reflected in English architecture and such books on the subject as were current here. Among these it is possible that James Gibbs' *Book of Architecture*, Sir William Chambers' *Civil Architecture*, *Paladio*, Isaac Ware, Robert Adam, and many of the minor books intended rather for the layman than the professional architect were known to him. Hooker had some technical training, for he was a City Surveyor for a considerable time and he doubtless enjoyed the acquaintance of many contemporaries of wealth and culture. His work, however, must be taken as an indication of the prevailing taste and tendency of his time. It is quite as much an expression of these as was the dress, the manners and conversation of the day, and, like them, suggests that adjective, then so common, "elegant." In this and all of his buildings Hooker indicates a mastery of the Greek orders and a wide acquaintance with their modifications in common use in the more pretentious works of the time.

In the capitals of the exterior pilasters, for instance, we find the rose at the abacus center inverted and projecting its full diameter. This is to be found in St.

Paul's Chapel, New York, and in King's Chapel in Boston, both much earlier buildings. The absence of any portico at the principal entrance is almost unique in this type of building, and entirely so among all of those known to have been designed by the same man. The treatment of this entrance is also unusual—note the curves of the landing platform and the door sill, forming a wider landing. This is very successful in removing the otherwise too apparent lack of liberality in approach.

The sharp reduction in scale of the wings is also noticeable on analysis, but not at all in ensemble.

The whole exterior is formal and this is curiously emphasized in the second-story windows west of the wings. These are crossed by the third floor not far from the spring of the arch, but so carefully is this concealed inside that one of the professors, though he had spent thirty years of his service in daily occupation of this very room, had never noticed it.

Like many similar buildings the Academy was designed for three aspects only, the front and ends. The rear half of the building is of three stories and the front only two. The ends being cared for by the dummy window arches, the rear was frankly drawn with its three levels indicated and without any decoration whatever beyond the cornice and balustrade.

Clearly, Hooker knew the value of mass and wanting this he deliberately combined his two and three floor elements in one large block rather than indicate the "great room" or chapel under a single roof as he might readily have done by sacrificing the desired impressiveness of a central mass with minor wings. Having gotten this he was able to crown it with a cupola of unusual beauty and of sufficient size to dominate the whole.

The vane shown on the detail sheet of

the cupola is the original one and now replaces in the attic, having been superseded by that shown in the photograph. No bell was ever installed.

Another instance of successful mass design was seen in Albany in the old Mechanics' and Farmers' Bank Building erected in 1814. The writer had always ascribed this building to Hooker, but was informed very positively by Mr. Dudley Olcott, President of the Bank, that this was a mistake and that he thought the architect's name was Smith. In the absence of any record or assumed positive knowledge we may be forgiven for clinging to a conviction supported by every probability.

This building was of one story with an attic, unpierced; was of white marble in severely classic feeling and was crowned with a peculiarly formed dome of ordinary transparent glass. It is well remembered by the older Albanians and was illustrated some years ago in Scribner's. Like Mr. White's Presbyterian Church on Madison Square, it was in the shadow of an enormous and ugly neighbor and was designed in serene disregard of its environment. In spite of it, rather, it was easily the most notable object in that part of the city and remained so until demolished in the early '70s.

Returning to the Academy: if we enter the hall at the front, the viewpoint of Mr. Rockwood's admirable photograph, the architect's grasp of his problem becomes evident at the first glance. Here is formality in arrangement sufficient for dignity and again a wonderful skill in adjustment of scale. This is a strictly indoor formality, classic in feeling, but widely different from the exterior. All of the interior detail repays careful study. It was designed intelligently to produce a desired effect, and the effect resulted.

Mouldings were studied with reference to light and shade. Undercutting to intensify shadows was a matter of course, labor was liberally expended everywhere.

Take the front entrance for example: The mullions and transom are of stone, frames and architraves of wood and every moulding is scaled and formed for its own particular function. This is true through-

out the building—in the entrance hall and in the composition of the columned division between it and the stair hall we find an entablature and cornice with no architrave. This peculiarity is repeated in the framing of the doorways.

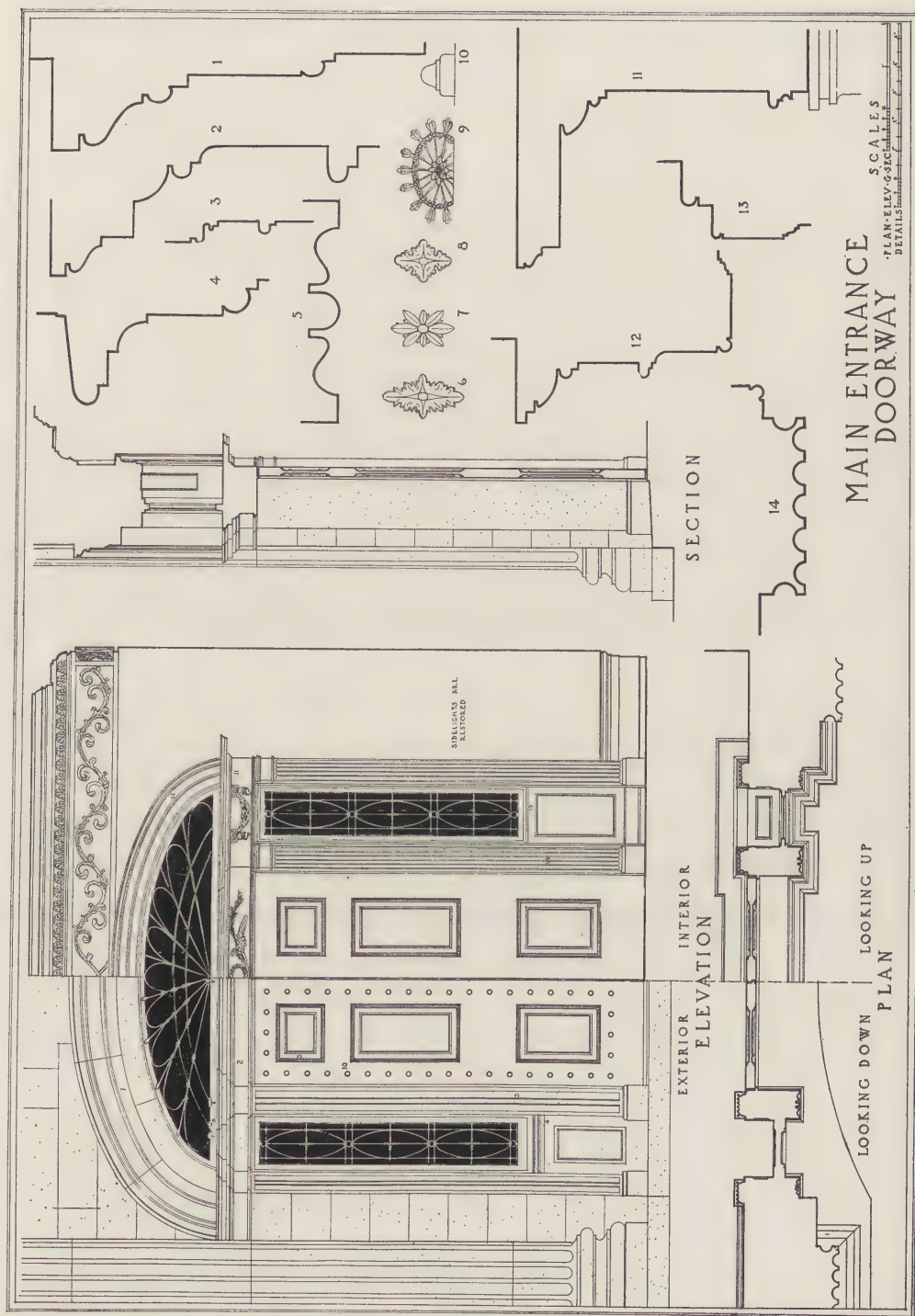
In the second-story hall we find the doors marked by similar free columns surmounted by an architrave and paneled frieze, but no cornice other than a very small inverted quarter round having a low plinth above it. Entering the "great room" or chapel the full entablature is found over all the doors.

The door shown in the southeast corner of the chapel, giving entrance to the second story of the wing, is new and therefore not shown on the drawings. If one were to compare this piece of work with the original, which it is supposed to reproduce, he would "take off his hat" to the earlier workman. It should have been entrusted to no one but a cabinet maker.

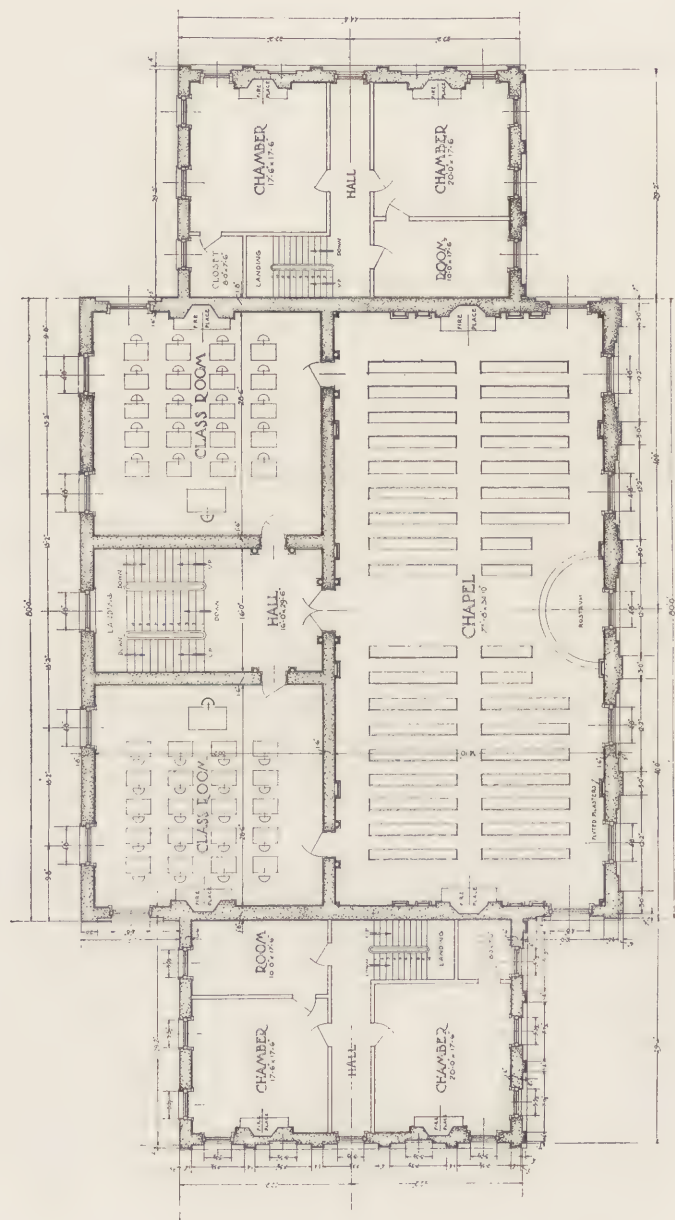
In the chapel we find Mr. Hooker in difficulty with his corners. The arrangement of pilasters centered on the piers was obvious enough; and had the exterior treatment of the front returned on the ends, there would have been no trouble. But the ends required blank wall from which to spring the wings; the windows were crowded toward the front and the corner pilaster was reduced in plan to a square equal to its projection. This required the unequal spacing of the pilasters on the long sides of the room, as indicated on the plan, but the variation is so slight as to be unnoticed.

The photograph of the chapel gives undue prominence to the ceiling decoration, which is not seen in the original. The ceiling and all of the ornament above the necking of the Corinthian capitals are white and the decoration is perfectly proportioned in weight.

The sections of mouldings show very well the freedom from mere convention that prevails in every detail. Whatever the source of Mr. Hooker's architectural training he was not hampered by any timid deference to European standards. Neither the sodden clumsiness of the English, nor the exuberance of the French Renaissance held him in its thrall. His



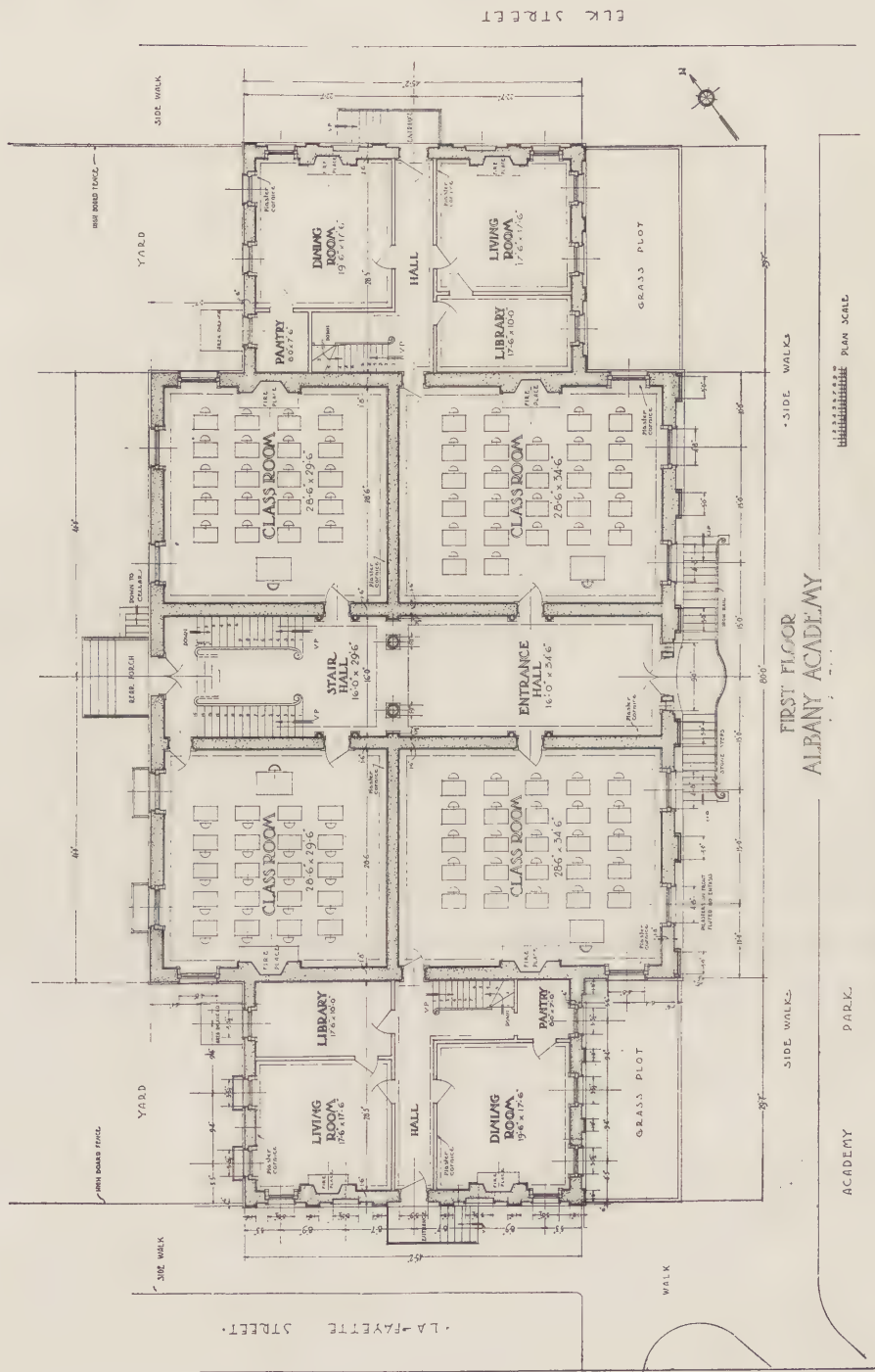
ALBANY (N. Y.) ACADEMY.



SECOND FLOOR ALBANY ACADEMY

PLASTER ON MASONRY
WINDOWS ARE FILLED
DOOR CASES ARE EXPOSED

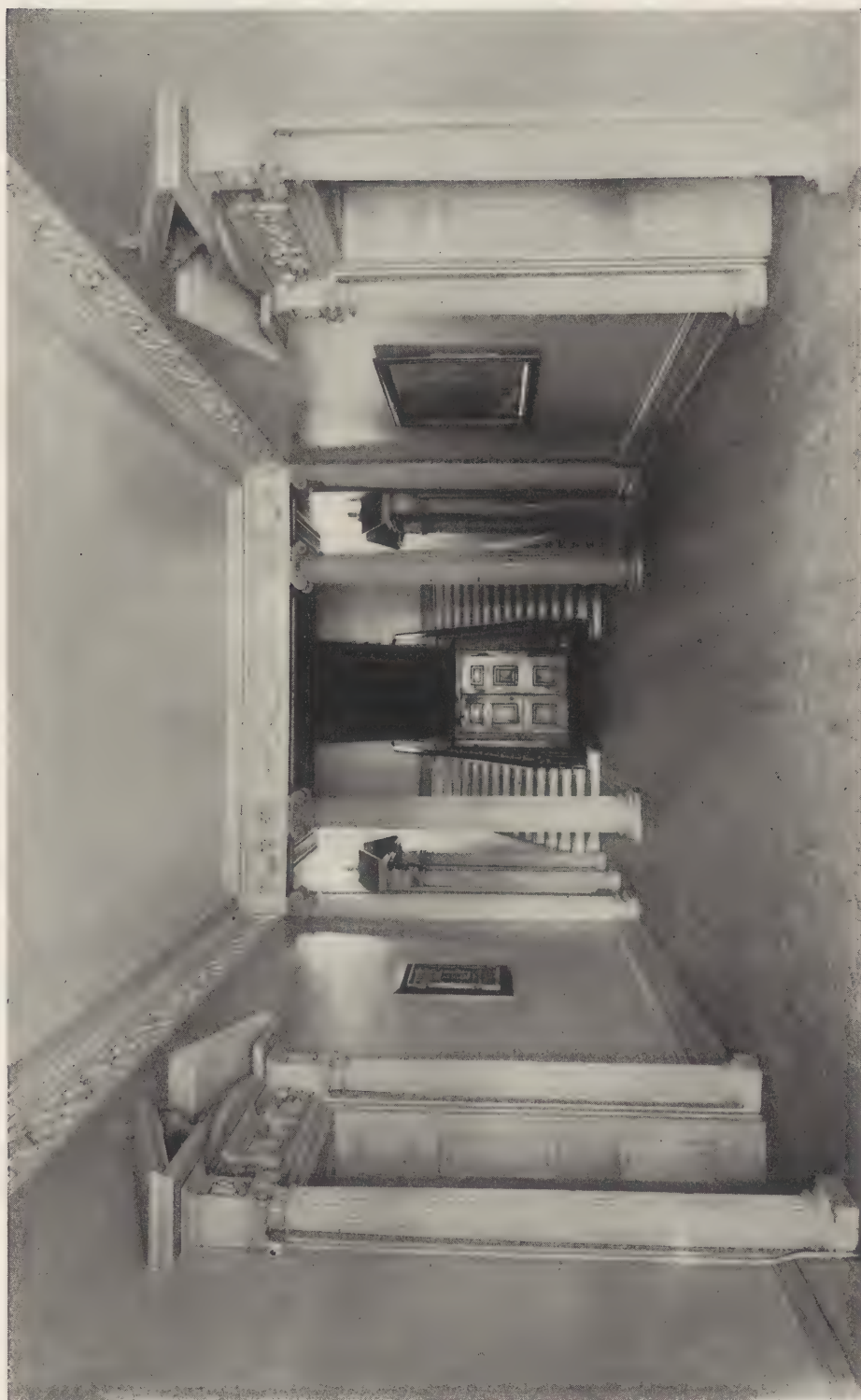
• PLAY GROUND •



FIRST FLOOR
ALBANY ACADEMY

PLAN SCALE

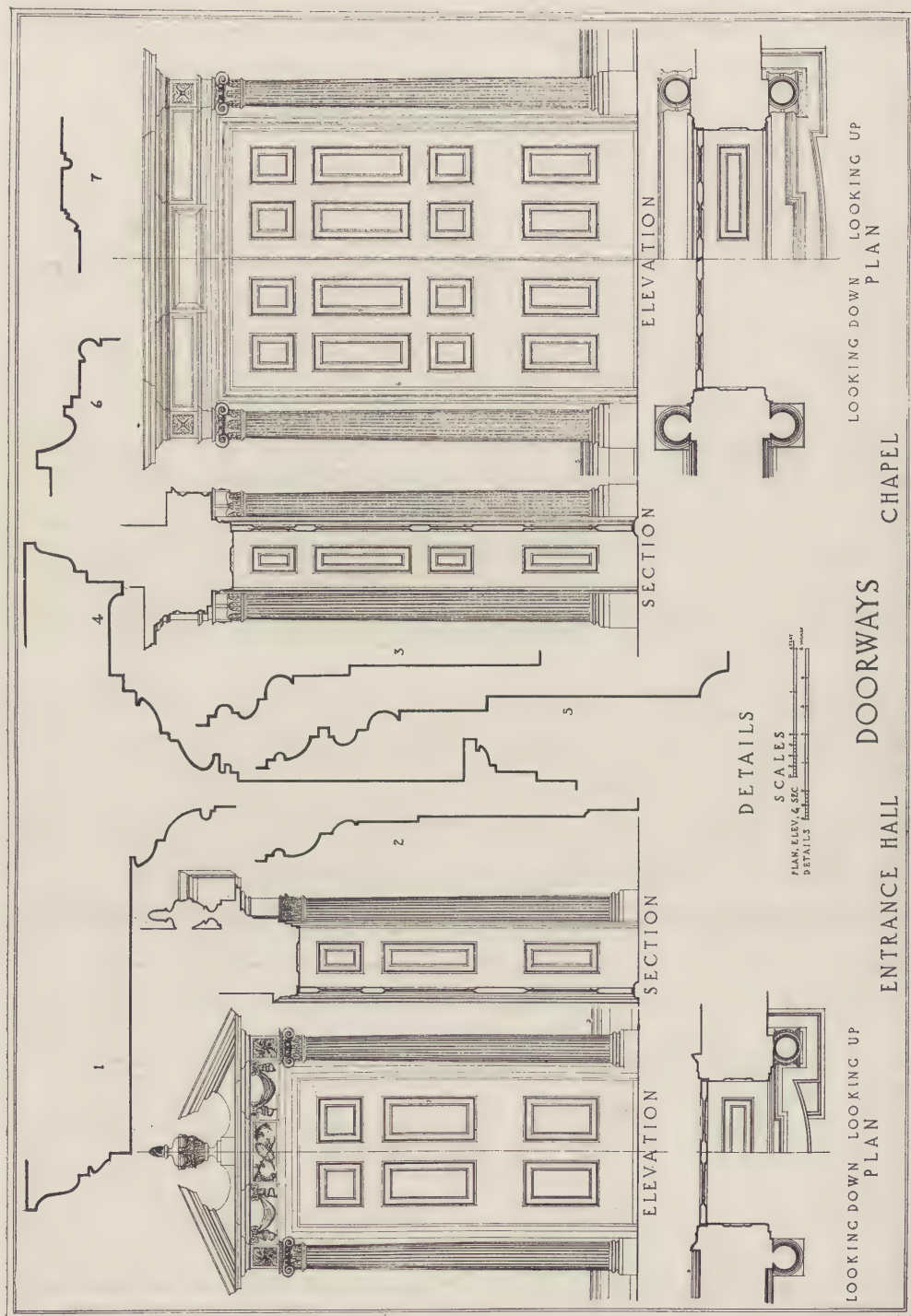
ACADEMY PARK



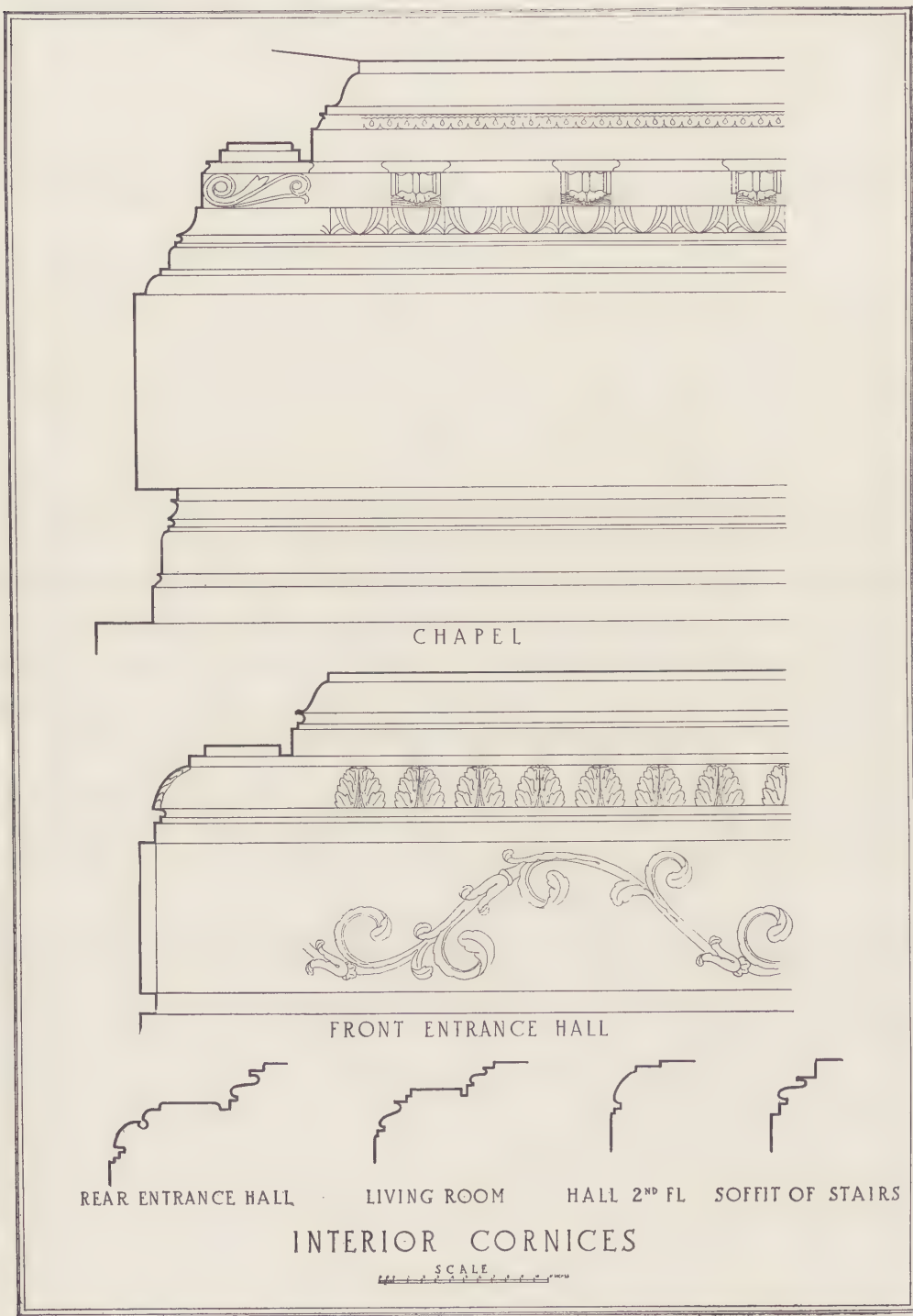
ENTRANCE HALL, LOOKING TOWARD
STAIR HALL—ALBANY (N. Y.) ACADEMY.



DOOR TO CLASS ROOM FROM ENTRANCE HALL,
MAIN LOBBY—ALBANY (N. Y.) ACADEMY.

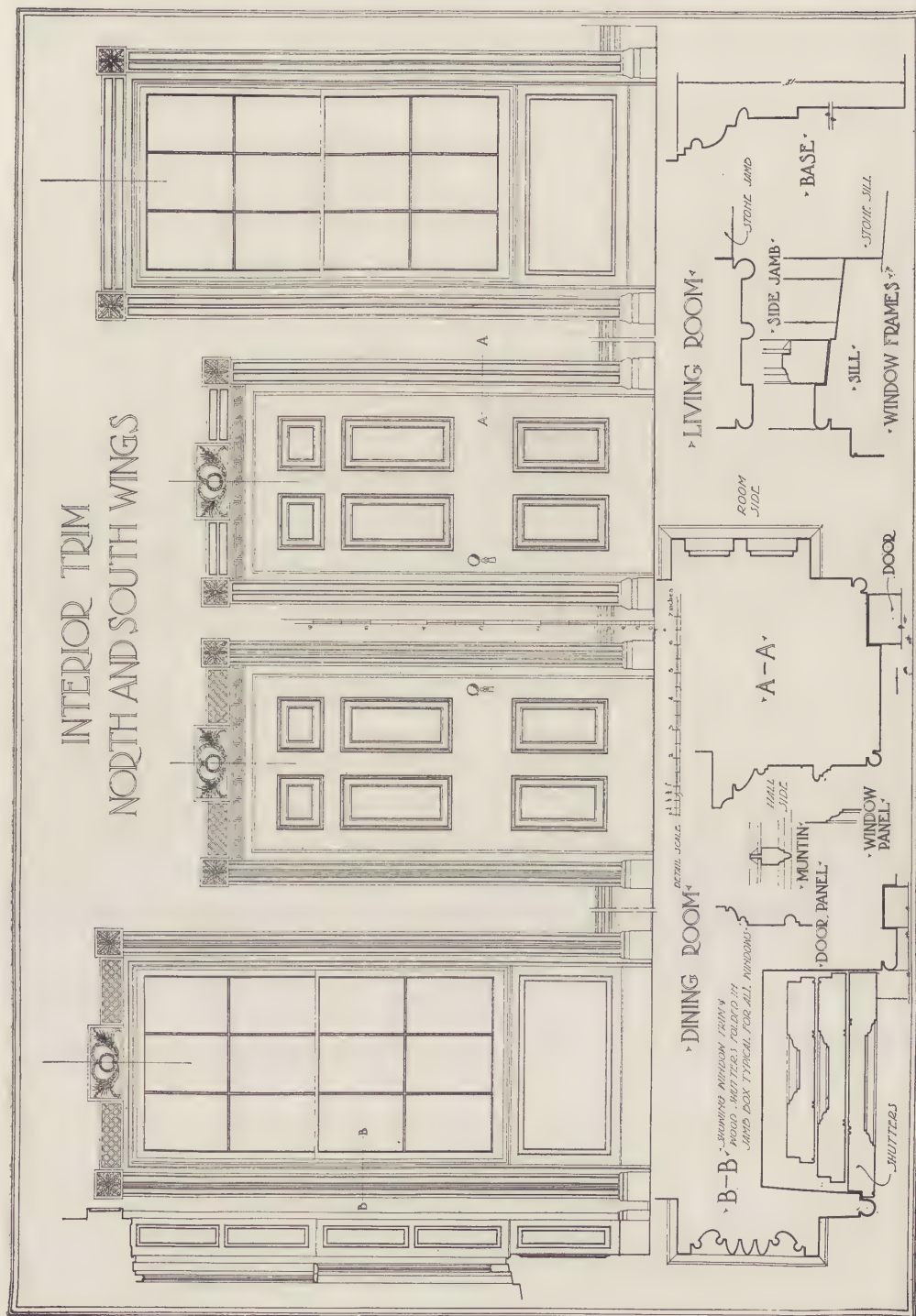


ALBANY (N. Y.) ACADEMY.



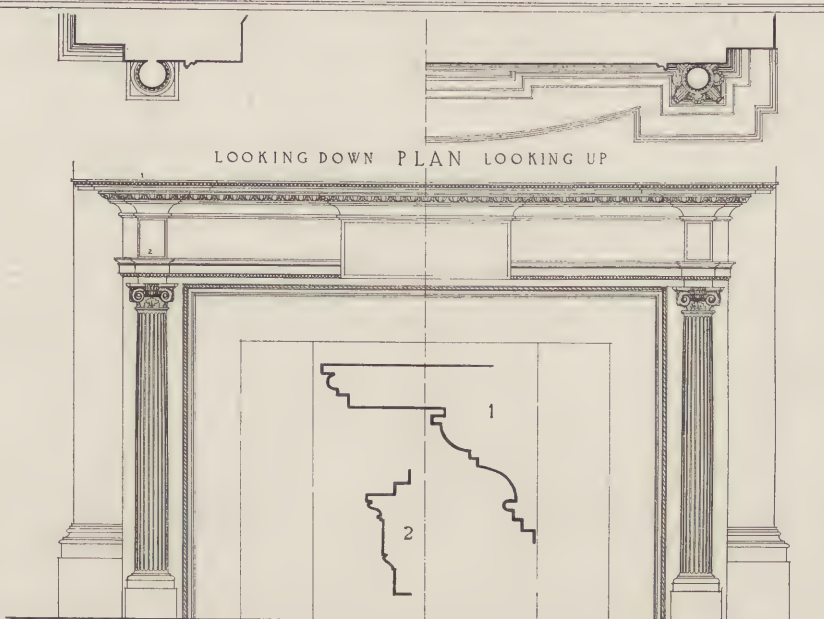
ALBANY (N. Y.) ACADEMY.

INTERIOR TRIM NORTH AND SOUTH WINGS

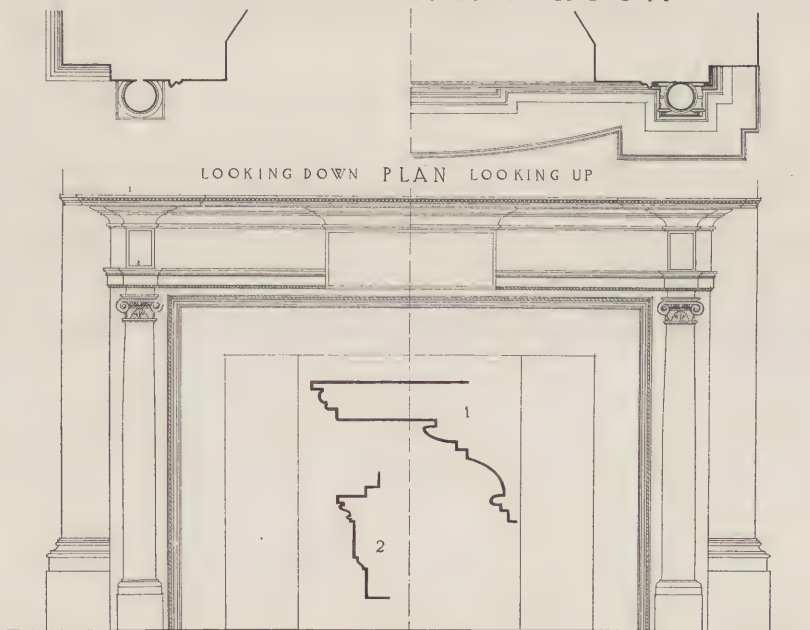




DOOR IN WINGS, FIRST FLOOR, ROOM
SIDE—ALBANY (N. Y.) ACADEMY.



ELEVATION
MANTEL IN DINING ROOM



ELEVATION
MANTEL IN LIVING ROOM

SCALES
PLANS & ELEV. 
DETAILS 

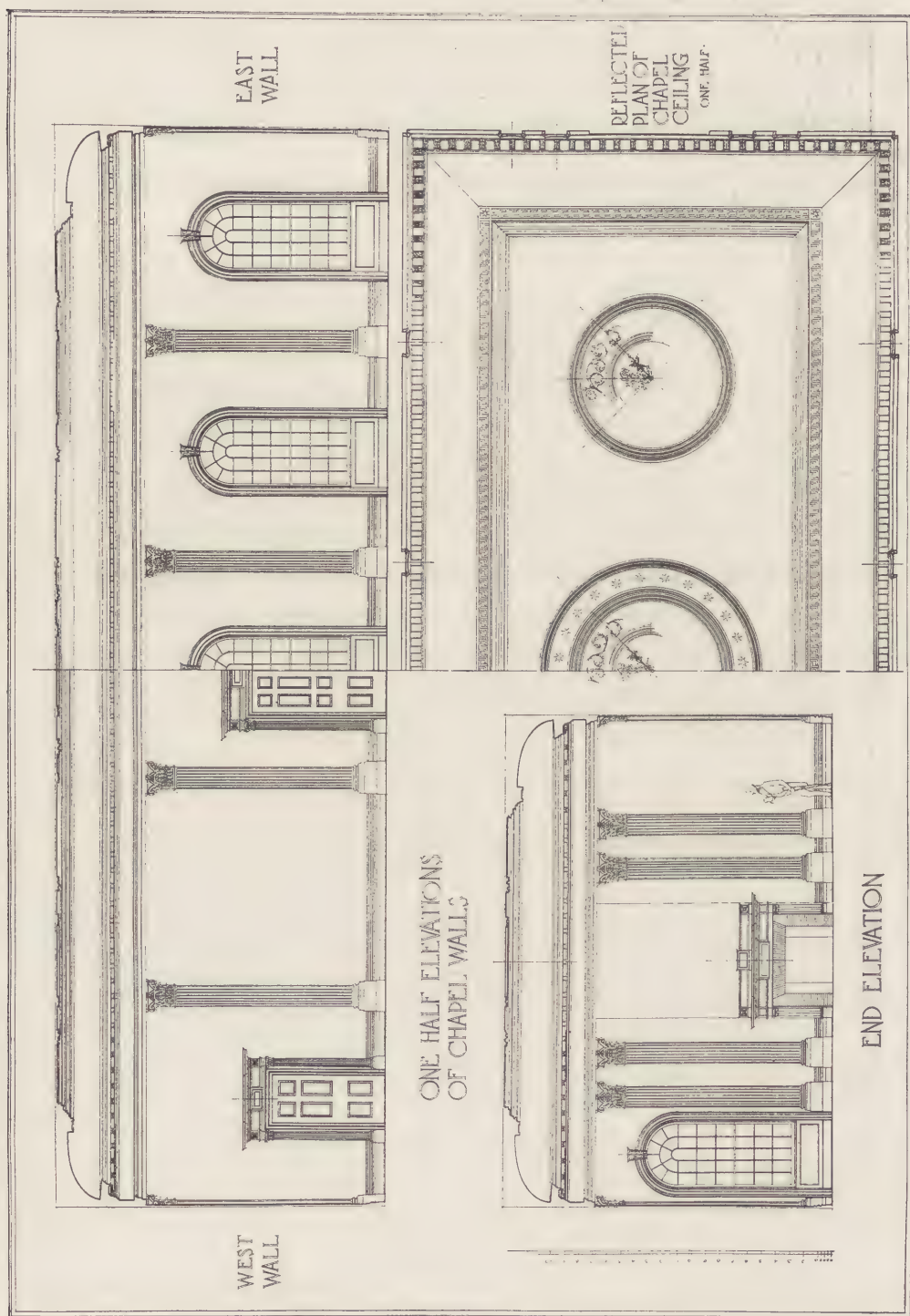


CHAPEL DOOR TO CORRIDOR
—ALBANY (N. Y.) ACADEMY.



Note.—Mantels in this room are modern, therefore not shown on drawings.

CHAPEL DETAIL, LOOKING TOWARD
SOUTH—ALBANY (N. Y.) ACADEMY.



work was manifestly of the new world. His decoration never descends to exploitation of the skill of his carver or stone cutter. Ornament, where it occurs, is for a decorative purpose only. Occasionally, as in the doorways of the first-story hall, it approaches heaviness, but never quite oversteps the limit of subordination to its base. Nor can we imagine any of it a servile copy; the versatility of the designer is so obvious as to preclude that suggestion.

The drawings and photographs illustrate the subject in hand so completely that it is unnecessary to particularize further. What may be read from them should repay their study and careful comparison with contemporary European work. The inevitable conclusion must be that in spirit and feeling this building like many others of the period is American.

It may be worth while to consider its genesis a little further than its architect. Its cost was nearly \$100,000 and the population of Albany at its completion was 10,020. Beginning in 1803 with the State Bank, we know of nine other buildings, excluding the Capitol, built by Hooker in twenty-eight years and averaging \$80,000 cost for each.

In 1686 Albany was granted a city charter by King James II through his Royal Governor, Thomas Dongan, the population being under 2,000. In the hundred and four years following to 1790 this had increased to only about 3,500, but in the twenty-five years from 1790 to 1815 it jumped to 10,020.

Albany was made the capital of the State in 1807, though the citizens had anticipated this by laying the cornerstone of the new capitol in the preceding year. It would seem, then, that Albany felt the benefit of independence very soon after its final achievement in 1783.

Mere material prosperity, however, will not explain the Academy, nor Union College, which was almost as much an Albany institution in its early days.

It is quite evident that a man of Hooker's genius could not have found expression for it without some sort of appreciation, and it is very certain that he found it in generous measure.

Albany was not so far behind New York in importance and its population was largely made up of successful men. Agriculture had ceased to be the sole reliance of the people. Manufacturing and mercantile business were claiming more of their attention. Liberal education as it was then understood was, next to birth, the hall-mark of a gentleman, and was eagerly sought for their sons by men who could afford it. And this "liberal" education included a smattering at least of architecture. It is a safe assumption that in the centers of population at that time a very much greater percentage of men had some knowledge of architecture than today. Witness the amateur architects, who were many.

Albany and some other towns like it abounded in buildings of good design and surpassing workmanship because they demanded them and appreciated them. Then too they had the workmen, men who worked for wages, but none the less for the love of the doing. In the Academy records one Snyder is spoken of as the "sculptor," doubtless he did that beautiful carving; very likely did both stone and wood.

It is a rare pity that Albany, where up to the '70s could be found scores of as fine examples of early American work as anywhere in the country, should have permitted their destruction during the very lowest period of architectural decadence. Until 1878 the Staats house, the last surviving example of the Dutch stepped gables in this country, stood on the corner of State and Pearl Streets. It was replaced by one of those neo-Byzantine rock-faced banks standing mostly on a single fat column like a lone pork barrel.

Not many years ago it was proposed to take the Academy site for the new Education Building and it is a source of lasting gratification that an alumnus, who was also an architect, was able to persuade the late Doctor Draper, then Commissioner of Education, that the building could be adapted to the present site and thereby secured its adoption.

The Second Presbyterian Church is of blue rubble stone trimmed with red Nyack sandstone and has a very fine spire rem-

inিসcent of Wren or Gibbs. The second St. Peter's and the old Fourth Presbyterian were similar in that they had wooden spires in the same manner.

Albany was rich in handsome dwellings, two conspicuous examples of which were those of Drs. James MacNaughton and Alden March. The former stood on the present site of the Kenmore Hotel, named for the Doctor's Scottish birthplace, and was of white marble with English basement. Its interior was designed with the same care as the Academy exhibits and mahogany doors and beautifully wrought white trim give it an atmosphere that was a fitting environment for the noble figure of the Doctor, a splendid example of the old school gentleman, one who exemplified the finest traditions of his race and his profession.

The March house is but a dim memory, but one that once seen could never be forgotten. It was also of white marble and its lot extended through a deep block with stables in the rear, which in material and spirit repeated the more important characteristics of the residence. A wonderful garden was seen through the wrought iron gates.

It is extremely probable that these houses were designed by Hooker, or possibly Taylor, who preceded him, but of whose professional activity little is known. All over the city were to be seen examples of this same intelligent care in design and workmanship. Some fine specimens are still to be found in the lower part of the city, now given over to the foreign contingent.

Albany, it is to be remembered, was an inland city; there were no railroads, water communication with New York was slow and uncertain until accelerated by Fulton in 1809, and the journey by stage was an adventure.

Even so, the stone for the Academy, the Capitol and the State Bank, as well as that for trimming numerous other build-

ings, was brought from Nyack by sloop. Lime came from Massachusetts, generally from the Stockbridge region. Building stone was plentiful in the vicinity and clay for brick abounded on both sides of the river. Glass was made at Sand Lake in Rensselaer County, about twenty miles away, and nails and building hardware were very early local products.

Prosperity nurtured a leisure class and leisure seems to have been well employed. Society demanded of those who sought its attention something more than money and Albany was known very early in its history as a centre of cultivation and the home of many men of more than local importance. Its population at the beginning of the nineteenth century had been stable for many years in the sense of permanent residence of its families. Property was handed down from generation to generation and local pride was strong.

Architecture in an inland city at that day was much more an expression of a social condition than it is now. The desire for the best is evident enough and what was achieved despite the limitations exhibits a high standard of architectural beauty and fitness.

This one building would be a sufficient indication of the conditions that made it possible, but it was one of many of equal merit and not all by the same hand. Their lesson is clear enough. They were built in sober mood, intended to last, to be seen of men, and their builders gave of their best with never a thought of having "another chance."

Not many years ago while riding about an old college town, the Litt. D. asked his two companions: "What is it about these old houses that makes them so beautiful? Is it convention or the eternal verities?" The architect replied: "You have answered yourself, it's both." The college president said: "Yes, but skillfully compounded." Perhaps he was right.



PAVL · W · BARTLETT'S LATEST · SCULPTURE



By JOHN · P · KLABER

THE Capitol at Washington is an edifice of the highest interest to the American public, since it is, as no other building can be, the visible symbol of the government of the United States. Dating from the early years of the republic, it has grown to keep pace with the growth of the country, and its history is closely connected with that of the nation. Architecturally, moreover, the Capitol is by no means unworthy of its pre-eminent position. The original design, by Dr. William Thornton, was one of the ablest works of its time, and the additions since made have for the most part added to its effect, particularly those by Mr. Thomas U. Walter, who designed the House and Senate Wings and the great dome. The interest centering in the building is further increased by its having served as the prototype of many others, including the capitol buildings of most of the States.

The execution of the Capitol, however, is in many respects far inferior to its design. A large part of the work was executed at a period of bad taste, when proper workmanship was almost unknown, and the details, particularly of the sculpture and decoration, are of most unequal merit, and in some parts of a very low order. The building has also suffered from much neglect, at various times, and even now is in urgent need of improvements that have been postponed for years.

A curious case of this neglect is that of the pediment of the House Wing, which has remained vacant for over half a century, although the corresponding

Senate Wing received its sculptural decoration as soon as it was completed. The House Wing was finished in 1857, and it was not until 1908 that Congress, on the initiative of Representative McCall of Massachusetts, decided to fill the pediment with sculpture.

In view of the haphazard manner in which artists for the work on the Capitol have been selected, it was a remarkable piece of luck that caused the selection of Mr. Paul W. Bartlett for this work, from a list of sculptors submitted by the National Sculpture Society. The selection is the more notable since Mr. Bartlett has met with tardy recognition from the government of his native country, the merit of his work having been previously recognized by several foreign governments, including France, Belgium, and Japan. Now, however, this forgetfulness is being remedied, and Mr. Bartlett is beginning to be justly accepted as one of the most eminent sculptors that America has produced.

The particular work in question is of a type that is peculiarly adapted to Mr. Bartlett's genius. His interest in sculpture has always been broad enough to include its relation to its architectural environment; he conceives his work, not for its appearance in the studio, but for its effect in the position for which it is intended. In the design of the pediment, he has seen, not merely a group of figures, but the expression of a national ideal and the embellishment of the most important building of the country.

The design of the pediment, on which



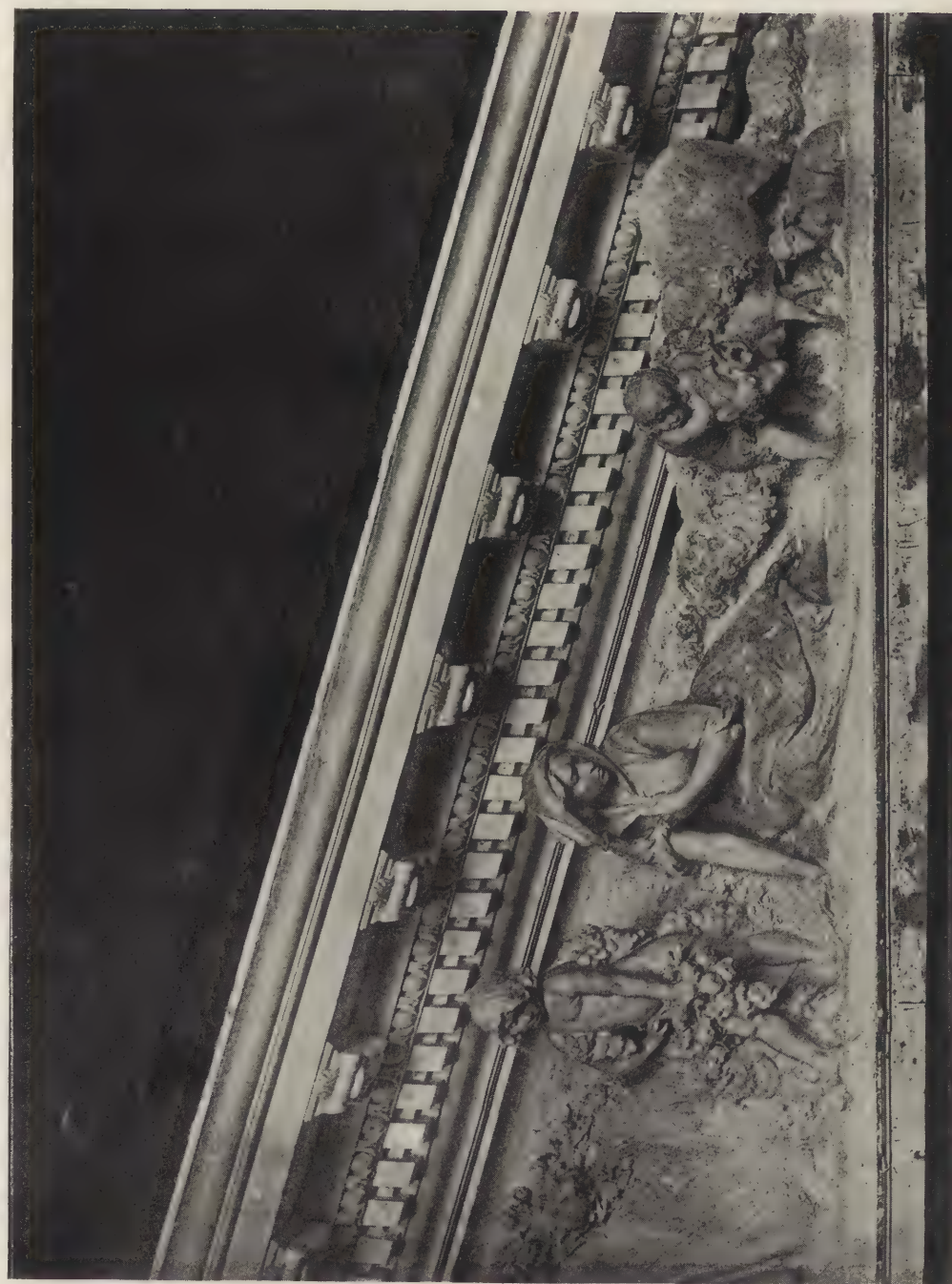
DETAIL OF PEDIMENT—HOUSE WING OF THE CAPITOL
AT WASHINGTON. PAUL W. BARTLETT, SCULPTOR.



DETAIL OF PEDIMENT—HOUSE WING OF THE CAPITOL
AT WASHINGTON. PAUL W. BARTLETT, SCULPTOR.



DETAIL OF PEDIMENT-HOUSE WING OF THE CAPITOL
AT WASHINGTON. PAUL W. BARTLETT, SCULPTOR.



DETAIL OF PEDIMENT-HOUSE WING OF THE CAPITOL
AT WASHINGTON. PAUL W. LARLETT, SCULPTOR.



THE CAPITOL AT WASHINGTON. THE PEDIMENT OF THE HOUSE WING, ON THE LEFT, IS TO BE OCCUPIED BY MR. BARTLETT'S SCULPTURES.

Mr. Bartlett has been engaged for the last seven years, and the work on which is now nearing completion, is intended as an apotheosis of democracy, as represented by the working people of the United States. In composing it the idea of the sculptor has been to avoid the usual banality of classic compositions, so often found in this class of work, and to make a decoration typical of modern times, without loss of the dignity befitting its position. This idea is altogether in keeping with the architectural treatment of the building, which, although classic in its general character, has sufficient freedom of handling to allow of this departure from tradition.

The space occupied by the sculpture is about sixty feet long and twelve feet high, so that the figures are approximately double the size of nature. The adjustment of the sculpture to the triangular space, always a matter of some difficulty, has been accomplished, not by a variation in the scale of the figures, but by their different attitudes, and by allowing some of them to encroach on the mouldings of the inclined cornice, a method of treatment that adds interest and mitigates the severity of the architecture.

The central figure of the group, more classic in character than the others be-

cause of its more abstract character, represents Peace, protecting Genius, a smaller figure holding aloft a torch. This central figure forms the connecting link between the two halves of the pediment, one representing agricultural and pastoral occupations, including farming, stockraising and horticulture, while the other represents various forms of industry, including printing, ironworking, textile manufacturing and fishing. The extreme ends of the pediment are occupied by waves, symbolizing the Atlantic and Pacific Oceans.

The entire composition is remarkable for its variety and interest. The figures are grouped in masses of light and shadow, avoiding the monotony of the usual pediment groups, and the sculptor has been most successful in adapting modern costumes to monumental treatment, and in combining in a harmonious effect the homely elements of every day life and the idealistic qualities proper to architectural sculpture.

This pediment group, as Mr. Bartlett has conceived it, is only part of a larger project for future development. The existing sculptures in the pediment of the Senate Wing, as well as in that of the central portico, are so inadequate that they must be replaced at some future date,



PHILOSOPHY—NEW YORK PUBLIC LIBRARY.
PAUL W. BARTLETT, SCULPTOR.



ROMANCE—NEW YORK PUBLIC LIBRARY.
PAUL W. BARTLETT, SCULPTOR.



RELIGION—NEW YORK PUBLIC LIBRARY.
PAUL W. BARTLETT, SCULPTOR.



POETRY—NEW YORK PUBLIC LIBRARY.
PAUL W. BARTLETT, SCULPTOR.



DRAMA—NEW YORK PUBLIC LIBRARY.
PAUL W. BARTLETT, SCULPTOR.



HISTORY—NEW YORK PUBLIC LIBRARY.
PAUL W. BARTLETT, SCULPTOR.



CENTRAL PAVILION OF THE NEW YORK PUBLIC LIBRARY,
SHOWING STATUES IN POSITION. CARRÈRE & HASTINGS,
ARCHITECTS. PAUL W. BARTLETT, SCULPTOR.

if the building is to produce its full effect. Mr. Bartlett has taken this fact into consideration in his choice of a subject for the House Wing. As this represents the working classes, so the Senate Wing pediment, in his scheme for future improvements, should symbolize the intellectual elements of the country, the arts and sciences balancing agriculture and industry, while the central group would be symbolical of the majesty of the government and the strength of the Union.

Another building, of scarcely less importance than the Capitol, for which Mr. Bartlett has recently executed some most interesting sculptures, is the New York Public Library. The library is superior to the Capitol in certain respects, being the work of a single period and a single firm of architects, and thus more unified and consistent. It was, moreover, built at a more favorable period, and the details and workmanship are far better than those of the Capitol, although the general effect is less impressive, and the proportions less fortunate.

The design of the library called for a considerable amount of sculpture, and this work has been entrusted to several different artists, chosen from among the best known sculptors in the country. Mr. Bartlett's work, the last to be completed, consists of six figures, each about eleven feet high, ornamenting the attic above the main entrance.

In the design of these figures Mr. Bartlett has overcome a mechanical problem of some difficulty. Despite their size, and the necessity of modelling them with considerable relief, in view of their location high above the ground, they had only a shelf one foot wide on which to stand. Thus the adjustment of the figures to their position, the working out of their forms so as to obtain the necessary relief, became a most difficult matter, which but few sculptors would have had the

skill to solve with any degree of success.

The placing of the figures has been determined by the arrangement of the columns below, the four central figures being thus grouped in pairs, while the two end ones stand alone. From this grouping, enforced by the architectural design, the character and detail of the figures have been naturally developed.

The subjects chosen for representation are the various phases of literature, namely, from left to right, philosophy, romance, religion, poetry, drama and history.

It has been Mr. Bartlett's idea, in modelling these figures, to rely as little as possible on the use of accessory symbols, but rather to give each figure the particular character appropriate to its subject. The photographs show how he has developed this conception, each figure, by its pose and expression, indicating clearly the exact idea it represents, while the entire series of figures maintains an appearance of unity, and is altogether suitable to its position and to the relation between the sculpture and the architecture of the building.

The most notable characteristic of Mr. Bartlett's sculpture, both on the Capitol and the Library, is its thoroughly modern character. The aim of most of our sculptors, particularly in monumental work, has always been to copy, as closely as possible, the work of classical antiquity, and above all that of the Greeks. But Greek sculpture, beautiful as it is, is the expression of a civilization very different from ours, and is no more suited to our aesthetic needs than is Greek architecture to our practical needs. Mr. Bartlett has shown, in his work, how sculpture can become modern without ceasing to be monumental, and has pointed out the lines on which American sculpture may attain to a far higher standard than it has yet reached.

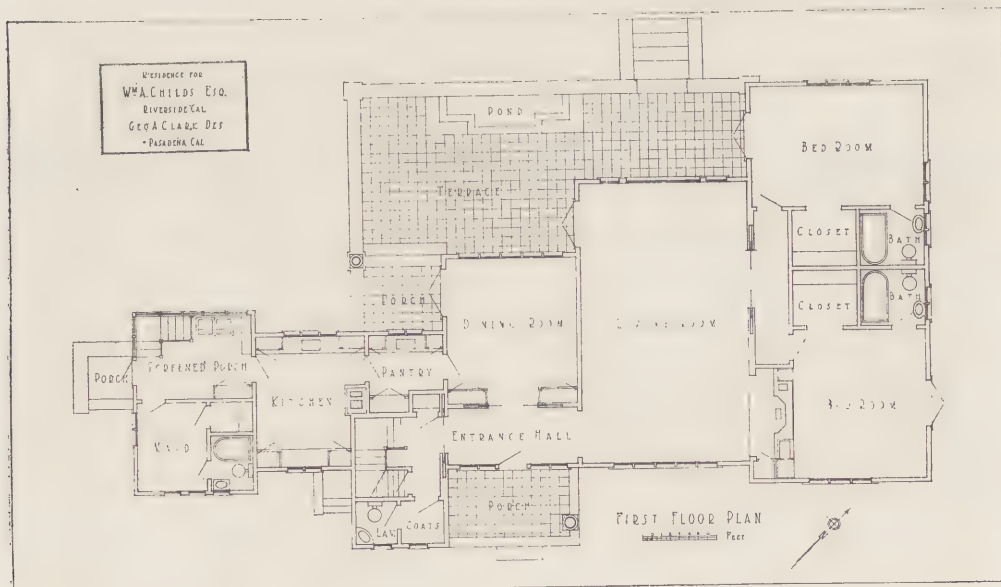
PORTFOLIO
OF CURRENT
ARCHITECTURE



ROSE



RESIDENCE OF WILLIAM A. CHILDS, ESQ., RIVERSIDE, CAL.
George A. Clark, Architect.



PLAN OF FIRST FLOOR—RESIDENCE OF WILLIAM A. CHILDS, ESQ., RIVERSIDE, CAL.
George A. Clark, Architect.



RESIDENCE OF WILLIAM A. CHILDS, ESQ., RIVERSIDE, CAL.
George A. Clark, Architect.



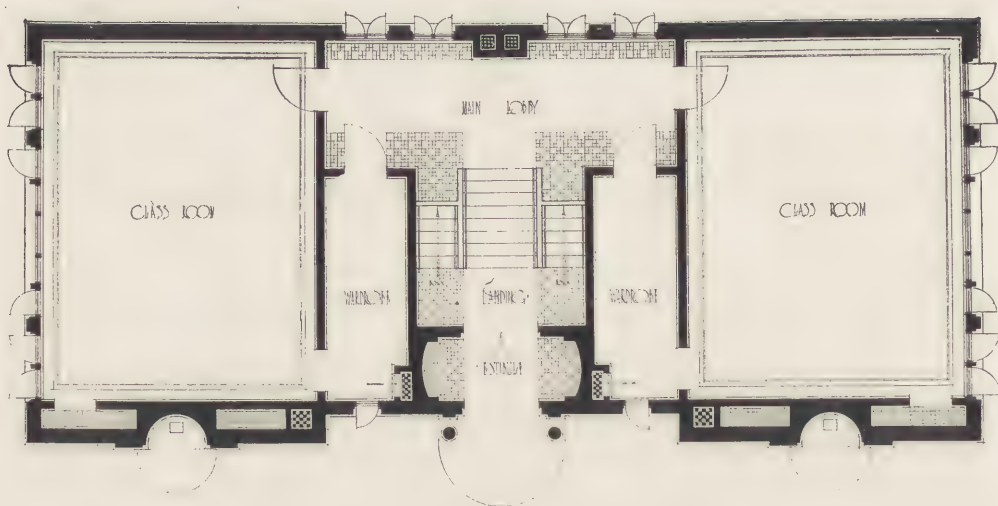
RESIDENCE OF WILLIAM A. CHILDS, ESQ., RIVERSIDE, CAL.
George A. Clark, Architect.



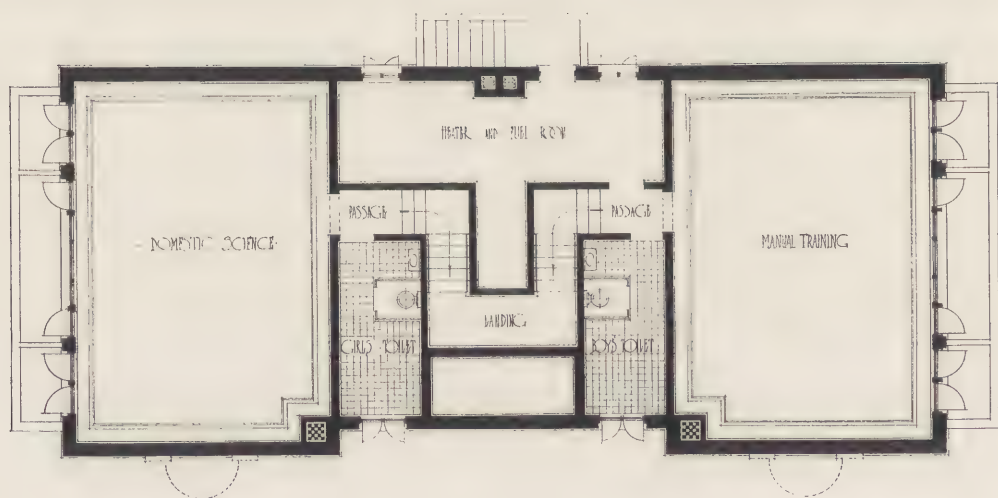
DISTRICT SCHOOL NEAR SPOKANE, WASH.
WHITEHOUSE & PRICE, ARCHITECTS.



DISTRICT SCHOOL NEAR SPOKANE, WASH.
WHITEHOUSE & PRICE, ARCHITECTS.

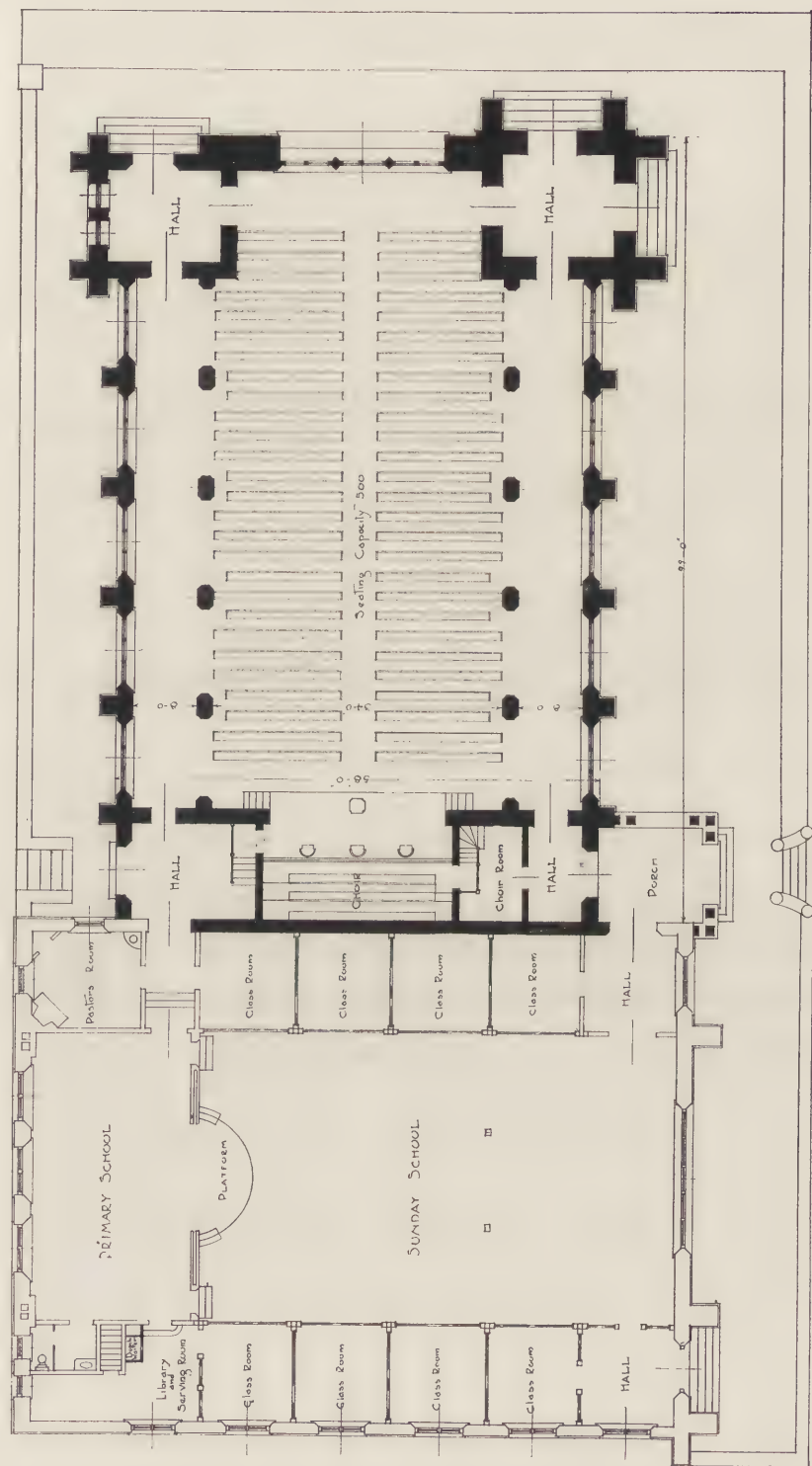


FIRST FLOOR PLAN



BASEMENT FLOOR PLAN

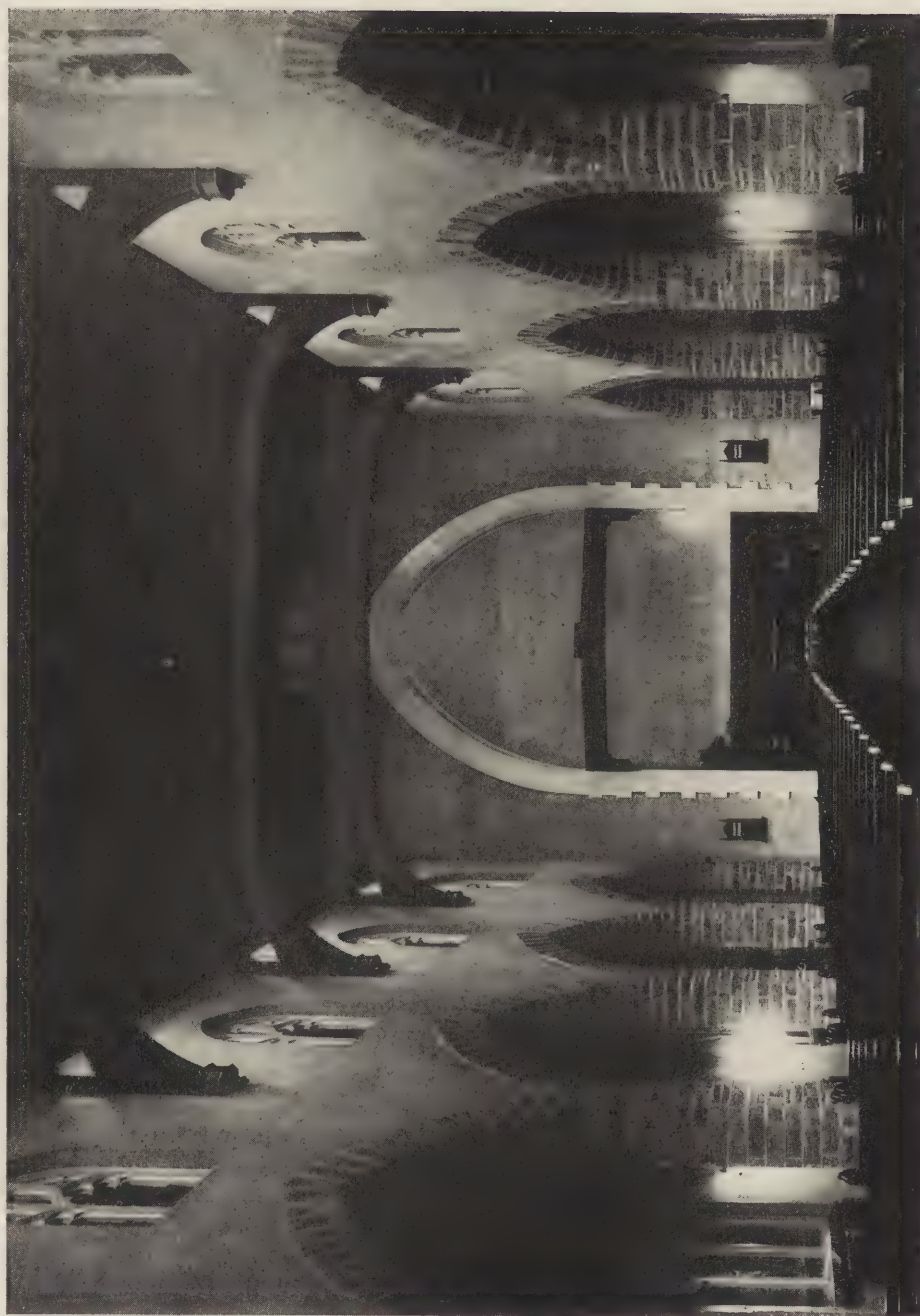
DISTRICT SCHOOL NEAR SPOKANE, WASH.
 WHITEHOUSE & PRICE, ARCHITECTS.
 For description, see page 297.



PLAN OF SUMMIT PRESBYTERIAN CHURCH, GERMAN-
TOWN, PA. DUHRING, OKIE & ZIEGLER, ARCHITECTS.



DETAIL—SUMMIT PRESBYTERIAN CHURCH, GERMAN-TOWN, PA. DUHRING, OKIE & ZIEGLER, ARCHITECTS.



VIEW IN NAVE—SUMMIT PRESBYTERIAN CHURCH, GER-
MANTOWN, PA. DUHRING, OKIE & ZIEGLER, ARCHITECTS.



VIEW TOWARD CHANCEL—SUMMIT PRES-
BYTERIAN CHURCH, GERMANTOWN, PA.
DUHRING, OKIE & ZIEGLER, ARCHITECTS.



VIEW IN AISLE—SUMMIT PRESBYTERIAN CHURCH, GER-
MANTOWN, PA. DUHRING, OKIE & ZIEGLER, ARCHITECTS.



PROF. FROTHINGHAM'S NEW VOLUMES

In Continuation of Sturgis's "History of Architecture"

By RALPH ADAMS GRAM

IN writing the two final volumes of the great *History of Architecture** projected, and half finished, by Russell Sturgis, Professor Frothingham has admirably accomplished a very difficult task. An exhaustive, and at the same time concise, history of all architecture from the earliest times that should incorporate the new knowledge acquired during the last generation, and in the English tongue, was imperatively necessary, for Ferguson, admirable as he was, no longer filled the bill. In so far as the matter, both literary and pictorial, is concerned, this now completed history serves to admiration. It is quite frankly a history written from the monuments, and from intelligent opinions of others thereon: it is in no respect a "philosophical history," nor does it claim to be this. If the need of an "objective" history is now supplied, as it is, the field is still open for a companion work that shall trace and demonstrate the other arts, and the vital impulses behind them all, that had their origin in the economic, social, philosophical and re-

ligious life of the peoples that have made art possible and, indeed, inevitable.

It may seem ungrateful adversely to criticize in any way so valuable a work as this, but one is forced to do so in the matter of "format." Most unfortunately the four volumes are printed on what is practically cardboard, not paper, and though the illustrations may gain thereby, the work itself is so unwieldy as to make its general use, except for occasional reference, quite impossible. A volume that weighs no less than four and a half pounds is not for reading purposes, and it is greatly to be hoped that the publishers may issue a new edition on paper of half the gross weight avoirdupois, so that this invaluable book may be used as it should be, as a textbook in schools of architecture and also for the general information of a public that needs it badly and would welcome it accordingly.

Professor Frothingham's first volume (Vol. III) deals with all Gothic except that of England, and is apparently susceptible of no criticism whatever, if one accepts, as one must, his own declaration that he has reduced to a minimum all consideration of "the correlation of architectural development with the rest of con-

*A History of Architecture. Vols. I and II, by Russell Sturgis, Ph. D.; Vols. III and IV, by A. L. Frothingham, late professor of archaeology and the history of art in Princeton University. Garden City, N. Y.: Doubleday, Page & Co. \$20.

temporary civilization—political, social, intellectual and religious.” His analysis is clear and exact, his estimate of comparative values admirable, his descriptions terse and technical, but so lucid that any intelligent layman can perfectly understand them. As in the case of Mr. Sturgis’s part of the work, the illustrations are not only innumerable, but cleverly chosen, perfectly reproduced, and so distributed that they fit exactly into a letter-press that depends on them as precisely as do the words of a lecturer on the slides he throws on a screen.

That unfortunate aberration of mind and of an atrophied critical sense (at the same time so Prussian and so pedantic) that tried to reduce Gothic and the study of Gothic to a system of meagre and scientific formulæ, has been wholly avoided, and Christian architecture from 1150 to 1400 has been treated as a consistent and essentially united style, wherever it is found, and whether its buildings were stone vaulted or not. The analysis of the development in France is excellent and one is particularly grateful for the care that is given in distinguishing the varied schools from Normandy to Languedoc. The only book we know that deals with Gothic in as constructive and explicit a way is Porter’s “Mediaeval Architecture,” 2 vols., but the two are not rivals, for the latter is a monumental work for the use chiefly of profound students, while the book we are considering is calculated for the use of those with less available time. As for the chapters on Gothic in Spain, Italy and Flanders, they are the best and fullest and most sympathetic showing of these most interesting national schools that have thus far appeared in any similar history in English.

The chapters on English Gothic are far less full and apparently less sympathetic, though this national school is given due credit as a brilliant manifestation of a great art. Of course no such fullness of treatment as Mr. Prior’s, in his masterly “History of Gothic Art in England,” was possible, but a more explicit study of the monastic ruins (where the best of English Gothic is to be found) would have been possible, and profitable, while something more than a paragraph could well be

given to the parish churches, which reveal, even more than cathedrals and abbeys, the peculiar virtues of English Mediaeval art.

Professor Frothingham has been singularly successful in discovering and recording the very names of the architects, or, rather, “masters of works” of the greater Mediaeval monuments, and the profession should be grateful to him on this account.

When he takes up the origin and development of Renaissance architecture he rises at once to the level of his best work on French Gothic. His analysis of origins is masterly, and he makes inevitable the inference that our careless way of speaking of “Early” and “Late” Renaissance gives an absolutely false idea of what actually took place, since it indicates a development varying only in chronology, whereas actually the motives and origins of the two episodes were absolutely different.

“Early” Renaissance might better be called “Mediaeval” Renaissance, for Brunelleschi, Michelozzo, Alberti, and even Bramante in his early days, returned for their inspiration not to the remains of Imperial Rome, but rather to the early and vital Mediaeval work of Italy, such as they could find in Tuscany in the XII and XIII centuries. All the good in Mediaevalism was still in them, their sense of beauty and integrity was unimpaired, and they naturally revolted against the popular pseudo-Gothic that had been introduced from France by the Cistercians and reduced to absurdity by Arnolfo and the conceited and bickering amateurs who were making Milan a scandal. It is a real pleasure to find Alberti given his true place as the greatest genuine artist of the time, and due credit assigned to Fra Giocondo and the Lombardi.

Broadly speaking, this “Early” Renaissance, which was in so many ways an Italian flowering of Mediaevalism, lasted up to the year 1500, after which a new fashion came in, that of an artificial and unstructural and pedantic classicism, mitigated by the excesses of the Barocco and Rococo. This was the style of the Bramante of the second period, of San Gallo, Peruzzi, Sansovino, Sanmicheli,

Palladio, Vignola, and it differed from the art of the quattrocento as much as this differed from Gothic, therefore some new system of nomenclature is necessary, and though Professor Frothingham suggests none, he leaves little doubt of its desirability.

The manner in which the Renaissance of France, Spain, Portugal, Germany, the Low Countries and England is treated

makes one wish there were more of it, but as it is, it is sufficient to give a clear and constructive view of a development that varied in its methods as much as in its results. On the whole it is possible to welcome the completed work as an invaluable contribution to the history of architecture, and as well to the teaching of this great art as soon as it is made generally available in manageable form.

BOOKS ON COLONIAL ARCHITECTURE

By RICHARD FRANZ BACH

Curator, School of Architecture, Columbia University

Part III.—Dwellings (Continued)

THE only comprehensive history thus far published which may properly be said to cover the field of Colonial Architecture adequately is that written by Harold Donaldson Eberlein under the title, *The Architecture of Colonial America*, (Octavo, pp. xiv. + 289, ill., index Little, Brown & Company, Boston, \$2.50). Since the point of view in this volume is decidedly in favor of the domestic side of our formative building era this volume may be properly discussed in the present subdivision of our general review. The author's conception of his task is concisely stated in his foreword. He treats his subject with reference to the close connection existing between architecture as the concrete product on the one hand and the social as well as the economic circumstances of that romantic period as determining causes on the other. By maintaining this close relation the buildings are peopled with the daily conditions of life among the founders of the commonwealth. This point of view, however, has already been practically illustrated in other volumes considered and will appear again in a number of examples yet to come under our notice. The greatest value of the present work lies in a different direction, for the author gives us, in addition, a careful, critical analysis of the origin and development of the various seventeenth and eighteenth century styles in which our early building history was so characteristically recorded.

At the outset it may be interesting to note the wording of the title. Mr. Eberlein has undertaken to write not of Colonial Architecture, but of *The Architecture of Colonial America*. For general purposes the term colonial architecture has been much misused and is in six out of ten cases misapplied. In the present series of reviews no fine distinction has been made and the word colonial has been taken in its broadest significance, namely, to include the architecture of the settlers and pioneers, that of the later colonists of various races, that of the Revolutionary times, and that of the early years of the United States as a nation up to the time of the ascendancy of the lifeless Greek revival. We are well aware, of course, that in this inclusive use of the style name we must make place for the directly transplanted forms taken verbatim from England, that is to say, the exact transliteration rather than translation of English classic architecture. There were, then, in reality two representative varieties of architecture in the original states; of these one was truly colonial in the narrow sense of the word, the direct product of conditions in the Colonies, their sturdy building vernacular; the other variety was foreign, the product of the England of the Georges, representing a land four thousand miles away from the Colonies and expressive of nothing colonial except the fact that every colonist longs for his original home. When the matter in question concerns his

dwelling itself that longing is vested in an actual copying of homeland examples so far as native skill and available local materials will permit. The Georgian remains an illogical colonial style. Its use is the result rather of wealth than of organic growth, although it is extensively favored in the early years of our national existence and is still the source of frequent suggestion in current practice. It never was an indigenous art language. It is a bitter truth that the true colonial and Georgian styles were to a certain extent of radically opposite suggestion. The first was the expression of struggle, the slow winning of the wild, and the early years of the laying of foundations; the other was to a degree the grand manner, the style of merchant princes and of a sort of plantation nobility, and was not called into requisition until the firstlings of building activity were considered inadequate to the richer conditions of the growing nation. Thus in many cases the Georgian building superseded the true colonial on the same site, and the manner of the later structure has long been mistakenly accepted as the full flower of stylistic beauty in this country during the first two centuries of its colonial as well as separate national history.

Both of these styles fell subject to the urgency of local requirements, the response to which remains to us in variegated regional manifestations, all adhering to the main style stem, yet each of them pronouncedly individualistic with reference to the immediate causes that made each vary from the general style expression. Thus in the true—we might almost say, aboriginal—colonial manner, as we have had occasion to point out before, one form is “to be found in New England, and outside of New England is not to be met with. Another type, of wholly diverse aspect, is peculiar to the parts of New York state settled at an early period by the Dutch colonists and to the parts of Long Island and northern New Jersey where Dutch influence was paramount. Still another and altogether distinct colonial type of architecture is to be seen in numerous examples in Pennsylvania, New Jersey and Delaware. A fourth type, with yet other clearly defined

peculiarities, may occasionally be discovered in Maryland, Virginia and the other colonies.” Characteristic of all these varieties is a quality of staunch native originality “due to the local forms, evolved in response to local exigencies, dictated by resourceful mother-wit and engrafted upon an inherited stock of architectural traditions which the first settlers had brought hither with them. In other words, it was the logical and necessary outcome of architectural precedent, modified by contact with a new environment and all its forms are clearly traceable to typical antecedents on the other side of the Atlantic.” As a whole, the true colonial manner was then a direct response both in construction and in design to the demands chiefly of utility; it remained to the end, and in its derivative effects still remains, a thoroughly unpretentious building manner.

Having thus disposed of the general considerations necessary for a broad interpretation of his field the author has taken the various phases of the subject in detail. He begins with the Dutch Colonial type to which considerable space is devoted, proceeds thence to the colonial architecture of New England, of the Middle States, and of the South. The same geographic subdivision is then followed for Georgian architecture, in the discussion of which three distinct stages of the Georgian style are established. “By systematically scrutinizing and comparing the Georgian work throughout the colonies, always keeping the historical background in view, one cannot escape the conviction that there were three phases of Georgian manifestation, and, furthermore, that whatever minor local differences may have arisen, there was a fairly close chronological correspondence between them and the general phases that marked the evolution in England. Speaking approximately, we may say that the first phase included the houses erected prior to 1740 or 1745; the second phase endured from 1745 until about 1775 or 1780, while the third phase, profoundly influenced by Adam inspiration, lasted until the Greek or Classic Revival completely held the field.” This triple subdivision of the Georgian manner is then exemplified on

the basis of numerous extant buildings treated in detail. Finally it is given a particular application in the various broader regional manifestations of the style.

By far the greater part of the book is devoted to domestic architecture. There is a chapter on the Post-Colonial period, another on the public buildings and still another on the churches. Two very good concluding chapters cover "Materials and Textures" and "Early American Architects and Their Resources."

Mr. Eberlein deserves great credit for producing the first general history of colonial architecture; we are convinced that his book will at once find favor.

It is obvious, of course, that within the scope of less than three hundred octavo pages a subject of such importance cannot be conclusively treated, nor would the format of the volume render possible any great detail in the way of illustrations. The author has apparently relied upon the reader's initiative in parallel research, for we are already provided with a goodly, though insufficient, number of folio works replete with photographic detail and measured drawings.

We cannot help but feel that a bibliography of such specific works might with benefit have been appended to Mr. Eberlein's book.



Modern School Houses. Part II. Illustrating and Describing Recent Examples of School House Design Executed in the United States. Ill., 9 by 12 inches, 80 p., index, with 169 plate illustrations. New York: The American Architect. \$7.50 net.

California Garden City Homes. A Book of Stock Plans. Ill., 6½ by 9½ inches, 78 p. Los Angeles: The Garden City Company of California.

American Art Annual. Who's Who in Art. Volume XII. Florence M. Levy, Editor. Ill., 6 by 9 inches, 538 p., index. Washington: The American Federation of Arts. \$5 net.

Comprehensive Plan of Newark. Ill., 6 by 9 inches, 172 p., index. Newark, N. J.: The City Plan Commission. \$1 net.

Bridge Foundations. By William Burnside, Assoc. M. Inst. C. E. 32 diagrams, 4¼ by 7¼ inches, 136 p., index. London: Scott, Greenwood & Son. New York: The D. Van Nostrand Co.

The Law of Architecture and Building. A Consideration of the Mutual Rights, Duties and Liabilities of Architect, Owner and Contractor, with Appendices and Forms. By Clinton H. Blake, Jr., A.B., A.M., LL.B., of the New York and Federal Bars, with a Special Introduction by

Aymar Embury II. 6 by 9 inches, 294 p., index. New York: The William T. Comstock Co. \$3 net.

Engineering As a Career. A Series of Papers by Eminent Engineers. Edited by F. H. Newell, Professor of Civil Engineering, University of Illinois, and C. E. Drayer, Secretary Cleveland Engineering Society. 5 by 7 inches, 214 p. New York: D. Van Nostrand Co. \$1 net.

Interior Decoration, Its Principles and Practice. By Frank Alvah Parsons, B.S., President of New York School of Fine and Applied Art. Ill., 6 by 9 inches, 274 p., index. Garden City, N. Y.: Doubleday, Page & Co.

Packing House and Cold Storage Construction. A General Reference Work on the Planning, Construction and Equipment of Modern American Meat Packing Plants, with Special Reference to the Requirements of the United States Government, and a Complete Treatise on the Design of Cold Storage Plants, including Refrigeration Insulation and Cost Data. By H. Peter Henschien, Architect. Ill., 6 by 9 inches, 295 p., index. Chicago: Nickerson & Collins Co.

Official Swedish Catalogue, Panama-Pacific International Exposition, San Francisco, 1915. Ill., 8 by 11 inches, 287 p.



A Reminiscence and an Appreciation.

The demolition of the Victoria Hotel building, in this city, calls back to mind the early architectural ideals and conceptions of Mr. Richard M. Hunt. When Mr. Hunt had returned from Paris, after his years of study, travel and practical office work abroad, he had not only learned "to draw and design" after the official manner, but also to "think" independently about architecture; and he brought back with him definite ideas and aims. He knew his subject well, had studied its literature and philosophy, had come in contact with the brightest men of his time and was cognizant of the ideas of the classicists, the romanticists and the rationalists alike. Viollet-le-Duc was then at his height as an author, teacher and leader. He taught that architecture should be artistically expressed and expressively ornamented construction and that it should also reveal plan, purpose and character of a building, instead of being purposely constructed decoration behind which its real elements were hidden. There was also at that time that great teacher, Gottfried Semper, at Zurich, preaching with his remarkable book, "Der Stil," the derivation of most architectural forms, types and ornaments from the ceramic, the textile and the metal arts, and from the early practice of personal adornment and the beautifying of the movable or permanent abode. He disclosed the "technical" side of design in the detail and execution of the various elements and showed its required rational agreement with the character of the material concerned and the processes employed.

Mr. Hunt, although he had revelled in the glories of the Italian Renaissance and in the exuberances of the French chateau architecture, in the Byzantine and the Arabian wonders of the past, became imbued with these "rationalistic" ideas and made them

his own. These ideas of rational design in architecture, although mainly deduced from the manner of Gothic and Romanesque work, were not put forth as a matter, so much, of any particular historical style or association of forms and ornament as of a principle of "free expression" in every sense, and capable of being applied in association with any past style or with new, original, invented forms, moldings, ornaments, and with elements of composition arising naturally from the factors of plan and construction.

And thus, when Mr. Hunt started practice in New York, he applied these ideas as an artistic creed, a conviction, as a "mission," he hoped, for American architecture. Here, in the United States, there seemed indeed a field, he thought, where architectural practice was less rigidly tied down to the tyranny of tradition, school and established taste, and where something might be done in the way of making a fresh and clean start towards better things. Mr. Hunt was favorably situated financially, by connections, by his artistic reputation, by his personal earnestness and eloquence to secure a class of work and clientage that gave him the opportunity to express his faith. As a result there appeared, successively, such buildings as the Tribune Office, the Coal and Iron Exchange, the Victoria Hotel, the Lenox Library, various apartment buildings and work of similar class, variety and design in other cities. These designs constituted an architectural sensation, they were, in fact, a revelation; they were, alike, admired and condemned, praised as works of new inspiration, or denounced as a mere fad and mannerism. But their "honesty" of design, their straightforward expressiveness, their fine composition as to masses and proportions, their strong, eloquent and original detail were freely admitted. In all general matters of design they were works of the best possible arch-

itecture. In his aims and labors the chief was ably and enthusiastically assisted by Mr. M. Fornachon and Mr. E. Raht.

It is undeniable that Mr. Hunt had succeeded, gradually, to work out not only a consistent style of his own but a consistent general style of virile architecture that showed at a glance that there was a definite idea behind it. It had an attractive naturalness about it that "spoke;" the individual forms were of an elegant simplicity, the moldings were bold and expressive of technical character and structural function, the ornamentation was strikingly beautiful and original. Effective color grouping was an important factor in these designs by the skilful massing and treatment of brickwork, the judicious use of marble and granite, of decorated tiles, of painted ornamental iron-work, railings, copperwork and picturesque roof design. Much in this line we take for granted today from properly trained architects, but in Mr. Hunt's earlier time it was a novelty. Mr. Hunt was probably the first to express as a visible artistic feature the support of the masonry over wide storefront openings by the use of ornamental iron girders and jamb columns, as at the Victoria Hotel.

Most refreshing, also, was the total absence of needless, senseless ornamentation, of carved work that has no further meaning than to tell us that some people can carve, of the multiplicity of cartouches without purpose, of shields without a message, of niches without statues, of festoons, cupids, ornamental mouldings, of misplaced Gothic tracery, foliage, grotesques, of gargoyles without gutters, etc., etc., *ad nauseum*, with which the Americanized Beaux-arts style and the Americanized Tudor style are wearying us. Thanks to Mr. Hunt for his hatred of shams, the senseless, the superfluous. The old Tribune porch and tower still stand today as most remarkable pieces of composition and detail in his best vein. What wonderfully effective, yet simple, capitals that man composed! In wood-work detail, also, in his famous "chamfers," in his flat ornament, in the panel-detail, in his treatment of marble and plaster work this remarkable architect showed not only a consistent rationalistic principle, but also a fund of inventiveness as original as it was inexhaustible.

In his office there were no stereotyped practices and perfunctory methods of work, no servile and convenient copying of features and details from the work of the past; his architecture was not to be a mechanical rehash of what had already been done, but

a free and inspired effort, a process of bold thinking and "true designing" with a conscious artistic purpose. Moreover, architectural designing was to be under determined mental control, not haphazard, not an "accident" of mere draftmanship; the pencil was not to run away with set opinions of what would be right and sensible. Moderation was to reign at all times. The general character and cost of a building was to be proportionate to its uses; plain-purpose buildings were to receive plain treatment, the highest resources and effects of the art were to be reserved for the highest tasks. In short, there were to be no shirt-waist factories designed like Paris hotels or Oxford college buildings, no fire-apparatus houses like French castles; there was to be no prostitution of the choicest features of past styles nor of the most competent invention by ourselves upon the ordinary, everyday problems of building, simply because, perhaps, we could "afford it." Mr. Hunt thought, in a higher sense, that we could not at all afford to do this.

In this way Mr. Hunt labored for some years. Scores of students and draftsmen and brother architects came under the influence of his teaching. And what became of all this earnest effort? Did a great school of architectural thought and direction spring up and spread over the country? Was there a lasting architectural movement inaugurated, a "new style" established? Alas! it is my sad duty in truth to answer these questions negatively. No great lasting movement followed in the wake of Mr. Hunt's work and inspiration, less even than from the work of that later meteor, Richardson, of similar fruitful ideas. Here and there some isolated practitioners followed Mr. Hunt's lead for a time. While the general influence that followed from his example was a highly salutary one in all that relates to quality of architectural design in general, to a higher plane of construction, to a loftier conception of professional practice his particular style and direction, as such, died out. Nor is this strange fiasco, deplorable for so many reasons, very difficult to explain. For, concurrent with the earlier years of Mr. Hunt's career, as I have described it, a complete change had come over the entire life of the country. The accumulated wealth was bursting its bounds, the old simplicity was dying off and a new era of social, educational, artistic expansion was taking hold. With the increasing contact of our rich people with Europe, particularly Paris, the revelations of art and of luxury of life which

followed, and the desire to "enjoy and display" their wealth, likewise a new "atmosphere" had arisen for architecture. The call was for a more pretentious, ornamental, decorative and mobile style than any that had theretofore prevailed in this country; and this call, naturally, comprised furniture and furnishings, dress, social functions, the entire scale of life and living. Meanwhile American schools of architecture had arisen patterned after the French school, and an increasing number of American students completed their education at the Ecole des Beaux-Arts and by foreign travel. Irresistibly thus the great wave of the Renaissance, French and Italian, burst in upon us and swamped the country, architecturally, with Beaux-arts work and feeling—more playful and exuberant, if less truthful—more adaptable, if less vigorous—more resourceful, if less pregnant of permanent architectural advance—than Mr. Hunt's work, or any other previous work, had proven to be. Mr. Hunt himself, sad to record, ultimately succumbed to the seductive stagecraft of the new idea and, to a large extent, abandoned his own cherished style.

His first departure occurred in the direction of the rich and delicate Francis I. style when commissions of great munificence, like the Vanderbilt House at Fifth Avenue and 51st Street, came to him. For such work, and the sumptuous interiors it demanded, his early Spartan style was too bare and sober. That style of artistic masculinity, of truthfulness, of chaste simplicity, was well suited to the rugged austerity of the earlier Americanism with which it was contemporary, or to the plainer building problems generally, but not adequate to the translation of the rich French chateau style into an American city—a chateau of the most elaborate and costly description, in harmony with the new wave of luxury. And, even so, what a wonderful, scholarly, exquisite and original piece of work Mr. Hunt did produce with that famous house! It is, in my opinion, to this day the finest work of architecture in this country. Still later Mr. Hunt occasionally fell into the trough of the regular "French styles," with occasional departures into more severe Italian; at Biltmore, however, he created another work of great merit and beauty, in which, perhaps, he succeeded more than in any other to combine his early faith with his later leanings, compelled, largely, by the spirit of the new times.

The final outcome of the architectural evolution of Richard M. Hunt, whether it

be regarded as a development, a conversion or a retrogression, has always been something of an enigma to me, and, no doubt, to others also. It would have seemed more "natural" for him to gravitate towards a regenerated and modernized Gothic or Byzantine Romanesque than towards the formally decorative French styles which, above all others, were the furthest removed from his philosophy. Why, indeed, did he change at all? Why did he not stand firm and defy the onrushing wave of the Beaux Arts movement? He was "big enough" to do it and could have made a successful independent stand with his art. Or, perhaps, had Mr. Hunt learned to feel that his early style, with all its merits, had a certain severity about it that restricted its use, a certain lack of pliability, a certain paucity of resources (like the Richardsonian) that early led to exhaustion of effects and to monotony? It is possible. Art must be governed by ideas and by ideals; but the natural aesthetic impulses from which it springs must not be thwarted by too much theory; its manysidedness must be met, and this can only be done, in a highly advanced civilization, by a comparatively "rich" style.

It is my humble opinion that had Mr. Hunt right at the beginning, instead of following his own "original turn" so exclusively, or later, when he had come to feel the limitations of his style, espoused as his medium a somewhat rich and mobile Renaissance, like the Flemish or the earlier phase of the Italian Baroco, and imbued it with his rationalistic views and trenchant artistic intelligence, he might have accomplished a great deal towards a truly vital modern style of architecture. This road is still open to others; it would afford the freedom, virility, and large scale of motifs which much of our work demands, joined to unlimited richness of ornamentation. A successful beginning in this direction is already being made with the revived Spanish renaissance of the Pacific Coast. J. A. S.

An Interesting Country Schoolhouse.

A rural school should be a building that is, in itself, educational, and an inspiration to the teacher to give the pupils their first glimpse of the principles of architecture and art. This has been the ideal in creating the Whitworth District School, a few miles north of Spokane, Washington, designed by Whitehouse & Price, of that city.

Italian Renaissance was chosen as the style, since the grounds around the school are to be laid out along the lines of an Italian garden, with a pergola leading to a cottage for the teacher, an exedra where open air classes may be held, a sun dial, a bird bath, and other features in keeping with the scheme. Certain plots of the ground will be reserved for the teaching of experimental farming. The walls are of light buff cement stucco, with a roof of dull Italian red. The wide projecting cornice is of a putty tone, with modillions a shade darker, and is further enriched by sunken panels in the soffit, which are painted alternately light green and light blue, and raised panels on the frieze, which are of vermillion and orange.

Spots of vermillion are also used on the square blocks on the soffits of the modillions.

The entrance is a columned portico in wood, with a tile lunette panel to give color to the shadow, depicting children on their way to school. The end pavilions contain semicircular niches, in which are placed hermæ, cast in white cement. The subjects were chosen as being in harmony with the style of the building, and at the same time as being educational. The head



HERMES AND DRINKING FOUNTAIN—DISTRICT SCHOOL NEAR SPOKANE, WASH.
Whitehouse & Price, Architects

of a Florentine Girl, by Luca Della Robbia, has in front of it a small bubble drinking fountain. On the other side the head of the Laughing Boy, by Donatello, has in front a pool with a frog spouting water. Descriptions of the sculptors and their work have been read to the children by the teacher, and a personal interest aroused in these hermæ.

All the windows of the school are casements. There are four rooms in the building—two in the basement for manual training and domestic science, and two standard classrooms on the main floor—and all with excellent light. Toilets are also provided in the basement. The walls of the classrooms are in two shades of tan, and the floors and stairs throughout are covered with heavy linoleum. The rooms are

thoroughly heated and ventilated throughout by fresh warm air supply ducts and foul air vents. The foul air is exhausted from the classrooms through the wardrobes, thus insuring against the air from the wardrobes being breathed by the pupils in the rooms.

The school was planned so that four more rooms could be added in the future by extending to the rear two pavilions the same width as on the front, and forming a court in the rear.



COVER — THE NEW YORK CITY HALL. Water Color by Charles C. May	Page
THE NEW YORK CITY HALL. Part I. Historical Notes By Charles C. May	299
THE PUBLIC LIBRARY AT WALTHAM, MASS., AND THE GARTER MEMORIAL HOSPITAL AT LANGASTER, MASS. Loring & Leland, Architects	320
By Martin Mower	
GOTHIC ARCHITECTURE AND ITS CRITICS. Part I. The Lure of Gothic By A. D. F. Hamlin	338
THE DOME OF THE OLD ST. LOUIS HOTEL, New Orleans	355
By N. C. Curtis	
PORTFOLIO OF CURRENT ARCHITECTURE	359
THE ARCHITECT'S LIBRARY: Books on Colonial Architecture. Part III. Dwellings (continued)	384
By Richard F. Bach	
NOTES AND COMMENTS	390

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THE NEW YORK CITY HALL. ITS "IM-
MENSE FABRIC" AS COMPARED WITH
ONE OF ITS MODERN NEIGHBORS.

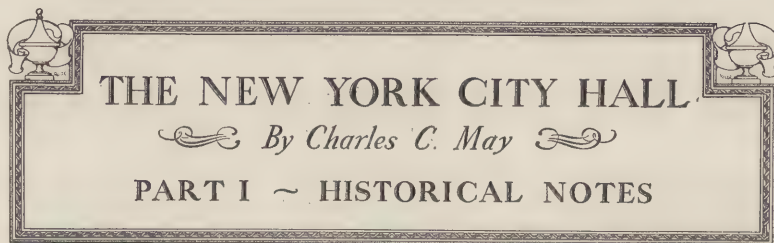
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AS no standard of value or size is absolute, but must be relative to its own epoch, so the New York City Hall, judged by bulk alone, has undergone a vast shrinkage during its century of existence.

To the citizens of its early days it loomed very large, the most monumental structure within their experience, and they spoke of it always in superlatives; today the inquiring visitor must take some pains lest in the maze of architectural monsters that surround it, the City Hall be missed altogether, and today one invariably hears it referred to in affectionate diminutives.

In the minds of the committee to whom the Common Council had entrusted the building of a new City Hall back in 1803, the structure was impressive

even in its first conception. They were frank to report that they "feel impressed with the magnitude of the undertaking." And through the years that followed, until the cupola had lifted its graceful silhouette into the city's skyline along with the spires of Trinity and St. Paul's, that impression must have been vastly deepened by the difficulties, structural, administrative and financial, that they were called upon to overcome.

Indeed, it is well nigh impossible for us in this day of skyscrapers, of syndicates, of bond issues in nine figures, to conceive the tremendous significance to our forefathers of this little building that rests so modestly within its providential Park.

But if in point of magnitude the City Hall has been differently regarded



THE "WALL" VIEW, NOW OWNED BY THE MUNICIPAL ART COMMISSION.

by succeeding generations, there has been only unanimity as regards its intrinsic architectural worth. Seldom has a building been awarded praise so wholesouled, so universal as that which has heaped itself upon this, New York's most precious structural inheritance. Indeed, when men have had the temerity to compile lists of the world's noblest examples of architecture, the New York City Hall has not infrequently been called upon to stand forth among America's representatives. Perhaps still more remarkable was its unanimous acceptance by its own day and generation.

Even when existent only in the form of competitive drawings it was recognized as worthy its high destiny. "The elevation," says the *Post* of 1802, "is elegant, and does no less credit to the taste and talents of the architects than it reflects honor on the judgment of the Corporation."

So in 1814, when the City Hall was newly completed, Thomas Stanford in his "Concise Description of the City of New York," placed his unhesitating stamp of approval upon the building: "Broadway," he says, "passes along the north side of the Park, which forms a

noble area, to the most magnificent structure in the United States, the new City Hall." And this merely in passing! When he comes up to the building itself, he grows more eloquent: "This magnificent structure unites a splendid combination of taste, grandeur and elegance. The front and two wings are of white marble and display the most beautiful order happily conceived and designed, and presenting specimens of sculpture honorable to any age." Incidentally, could anything better express the wideness of the breach between Stanford's day and ours than this, as he proceeds: "From its elegant dome a most delightful prospect may be obtained of the whole city and country round."

The growth which has today so hopelessly submerged the little cupola beneath the ever mounting host of giants that jostle about it had not proceeded very far in 1827, however, for James Hardie, writing at that time of the "Temple of Justice," "said to be the handsomest structure in the United States, perhaps (of its size) in the world," goes on to remark: "This chaste and beautiful edifice stands near the upper end of the Park, on the highest ground in that part



AN EARLY VIEW, SHOWING THE CUPOLA AS ALTERED IN 1830.

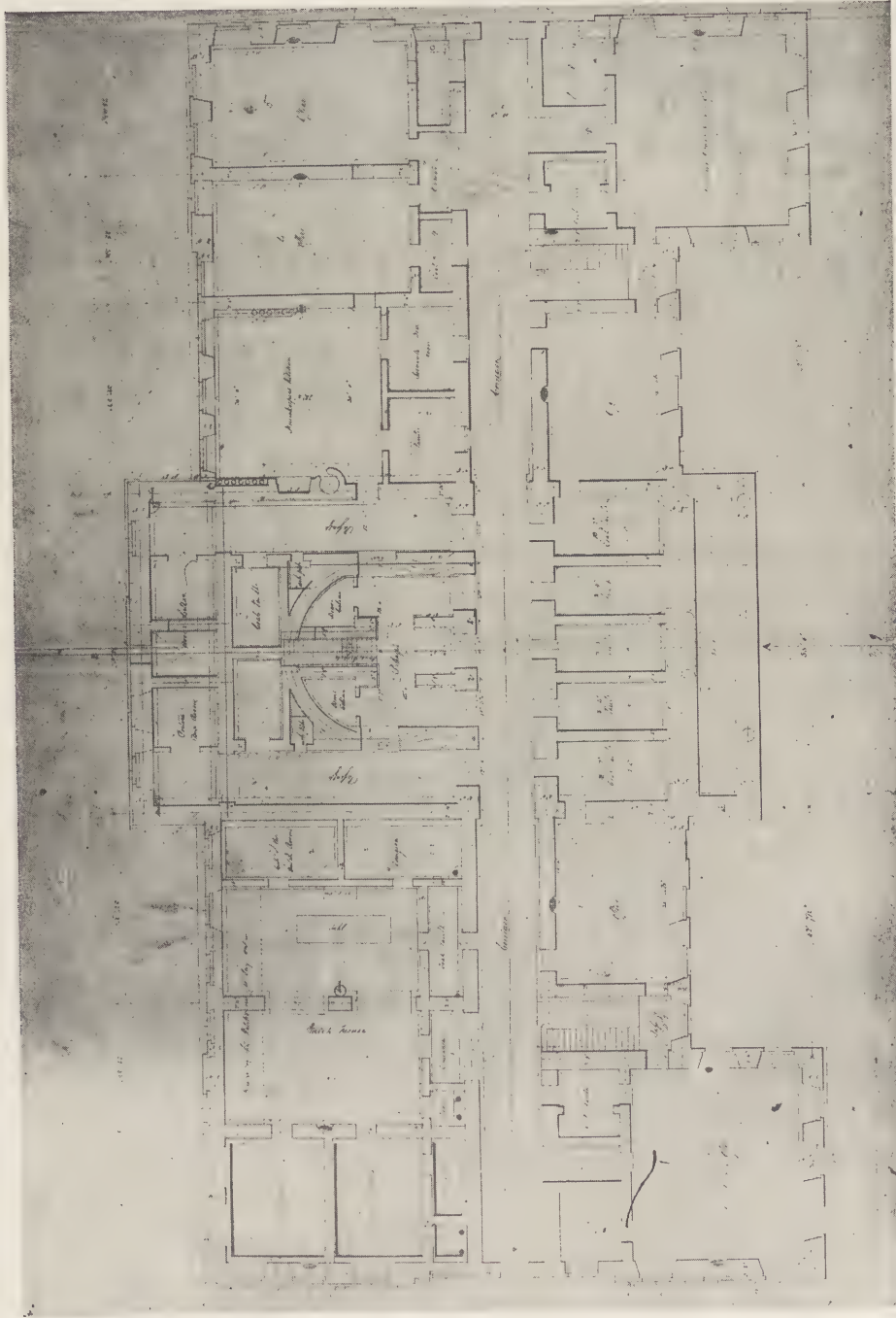
of the city; and is consequently seen to considerable advantage from almost every quarter."

So, in more recent years the City Hall has caught the eye and excited the admiration of many a distinguished critic and traveler, architect and layman. Most weighty, perhaps, is the tribute paid by Henry James, who pauses in his review of "The American Scene" to enjoy to the full the sensations aroused by "this divine little structure," justifying at some length the use of the first adjective, before starting his "adventure" of penetrating the mysteries of the interior. It is a pleasure, too, to hear from each succeeding occupant of the Mayor's office, a spontaneous expression which shows that they, one and all, have been sensible of the winning and lovable qualities of the building.

Just when toward the end of the 18th century the Corporate conscience became alive to the need of a new City Hall, and with whom the idea originated, is not clear, but it may well have had its birth in the numerous repair bills to the old City Hall (then standing at the corner of Wall and Nassau Streets). The minutes of the Common Council are filled with such items for a decade

and more prior to 1800. Incidentally, these minutes, in their quaint wording, and naive reflection of the spirit of their day, are of absorbing interest, so that it would be cruelty, in quoting, to tear from their setting these crisp paragraphs that portray the beginnings of our City Hall hardly more vividly in the direct references than in the luminous context.

One of the very earliest must be this reference under date of November 13th, 1776: "Resolved in consequence of the ruinous situation of the City Hall, that the Common Council sit at the House of George Repaireck, adjoining the City Hall, until the 13th of October next, and that he be paid for the same £12." And ten days later we find the following entry—the relative importance of the two resolutions curiously reversed with respect to allotment of space: "Unanimously agreed that a new City Hall is necessary. In consideration of the great inconvenience that attends this city being a trading place fore want of having light in the dark time of the moon in the winter season—ordered, that all and everybody of the housekeepers within this city shall put out lights in there windows fronting the respective streets according as the Mayor and two aldermen and two assist-



BASEMENT PLAN AS ORIGINALLY PLANNED AND BUILT.

Drawings in Part I of this article are from originals by John McComb. Reproduced through courtesy of the Municipal Art Commission.

ants shall direct." These directions, it may be noted, called upon every seventh householder to display and maintain a lantern before his house, the expense to be assessed equally upon all seven.

The above brave resolution was passed in the fall of 1776, after the Declaration, but war destroyed all possibility of new construction. The next references, therefore, return resignedly to patching up the old building.

This for example from a day in 1784, when the Common Council met at the "house of John Simmons, Inn-holder in the City of New York."

"Ordered that Mr. David Morris be Captain of the fire engine near the gaol in the stead of Mr. Pontius, who declines serving."

"An account of Michael Smith for labor and materials on the repairs to the City Hall, amounting to £77, 56½." And, Mr. Smith's account having been allowed by the Board, and the Treasurer directed to make payment "out of any monies which now are or may come into his hands," the Council passes on to decree "that Joseph Jedwin be and he is hereby appointed a Packer of Beef and Pork and a Cutter of Staves within this City."

We must remember too that these were the simple days when the Council had to appoint such Committees as that which was "to consider and report the best mode of supplying public Buckets at an early period of Fires, and the most suitable places to deposit the same."

Again we find the Common Council appointing "a Committee to direct the decayed Brickwork of the City Hall to be repaired and the street in the rear to be paved; to devise and direct measures for making the roof tight." Soon after, when the federal government was to make New York its headquarters, numerous further repairs and alterations were forced upon the long suffering council until at length on March 24, 1800, the nascent idea came to birth, and it was "ordered that Aldermen Lenox, De La Montagnie and Coles be a Committee to consider of the expediency of erecting a New City Hall, and to report to the Board their opinion thereon, as also the

proper Place, a Plan of the Building, an Estimate of the Expense, and in what manner the present City Hall ought to be disposed of."

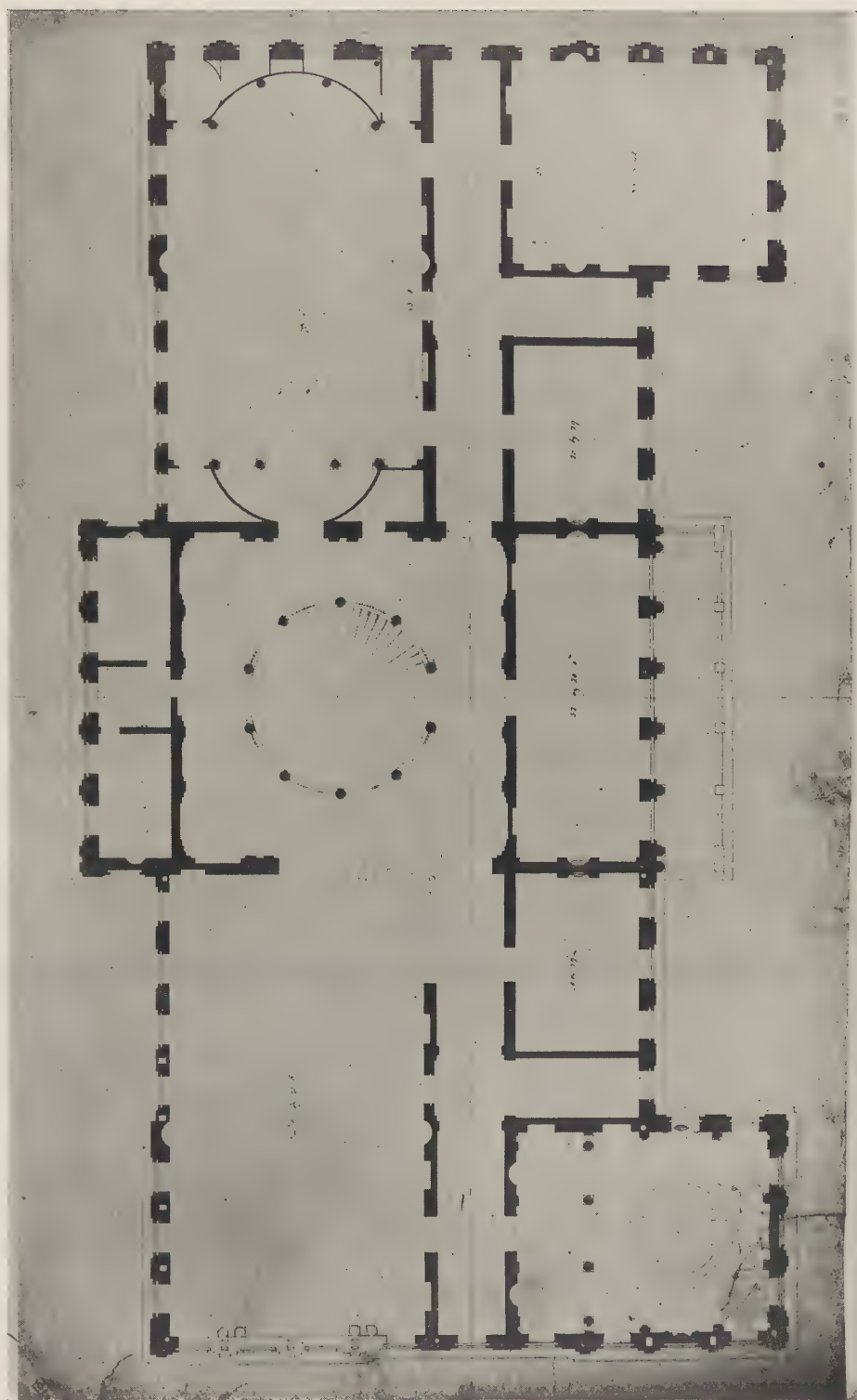
This building committee, like others of later days, was not distinguished for speed of execution, for two and a half years had elapsed before the matter was brought to the point of judging competitive drawings. On October 4th, 1802, "The Board, having proceeded to ballot for the plan of a Court House, and that of Mr. Joseph T. Mangin and John McComb, Junior,* having a large majority of votes, was accordingly adopted. Ordered that the Recorder be authorized to draw a warrant on the Treasurer in favor of Mangin and McComb as a premium for their plan being the successful one for \$350.00."

Having once determined on a plan the Common Council lost no time. One week later they ordered that "a New City Hall be erected conformable to the plan of Messieurs Mangin and McComb lately adopted by this Board," and they further proceeded to appropriate \$25,000 "towards erecting the same."

It is to be noted that up to this point the plans have been referred to by the Council as those of Messieurs Mangin and McComb; hereafter the former name gradually withdraws itself. During the winter while innumerable questions as to materials, site and modes of procedure were occupying the minds of the Committee, it was McComb whom they nominated as their "special agent." Likewise, in the spring of 1803, when they came to the appointment of a supervising architect, who, they said, "shall have complete control over every department," it was John McComb, Junior, who was chosen to receive the stipend

*From a pamphlet published by the Art Commission "John McComb was born in this city on October 17, 1763. His family was of Scotch origin and first settled in Maryland, but later removed to New York, where he practiced his profession. He furnished the designs for the front of the Government House in New York, which was erected in 1790, and for St. John's Chapel, the Murray Street and Bleecker Street churches, Washington Hall, and many other public and private buildings in this city, Philadelphia, and throughout the Eastern States. He filled many positions of honor and trust and died in New York on May 25, 1853."

It is only fair to add that Mr. McComb's share in the erection of St. John's Chapel was simply as a partner with his brother, while there is very slender evidence to connect him with the design of the Government House.



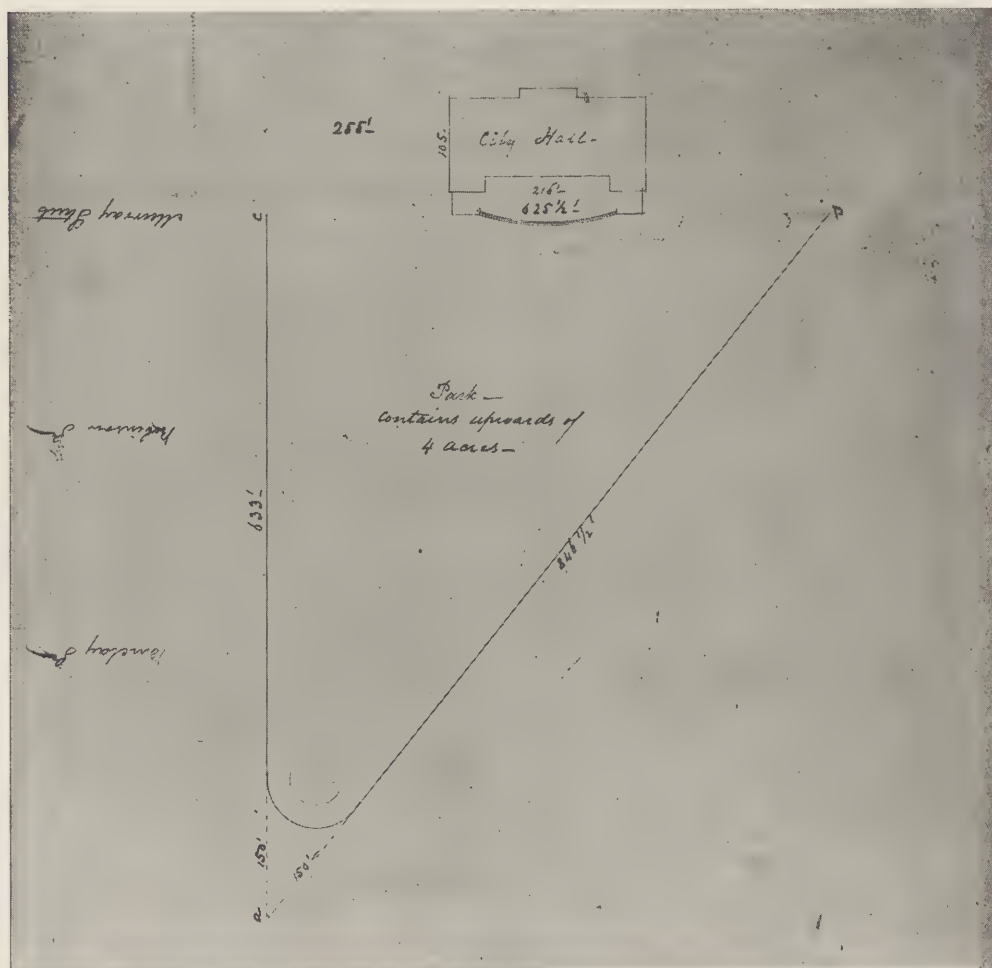
SECOND FLOOR PLAN, SHOWING THE GOVERNOR'S ROOM AT THE CENTER OF THE SOUTHERN FRONT. THE ROOMS AT EACH END WERE SUBSEQUENTLY CONNECTED WITH IT. THIS PLAN SHOWS THE ROTUNDA WITH TEN COLUMNS, AS EXECUTED; SOME OF THE EARLIER SKETCHES SHOWED EIGHT.

of "six dollars per day for each and every day he may be engaged at the New Hall." So too, it came about that when the time approached for laying the cornerstone, it was the name of McComb alone that was chiselled on the stone as architect. Meanwhile, the name of Mangin, senior partner in the firm that produced the original plans, was allowed to drop quietly from sight, to reappear only when another, more jealous apparently of his honors than Mangin himself, rose up in his behalf to compel public recognition for his share in the creation of the City Hall. Thus developed that peculiar, altogether regrettable contro-

versy that has waged with varying fortunes, but increasing intensity, through the century and down to our own day. The preponderance of traditional evidence, and virtually all the weight of active partisanship has been on the side of McComb, with only now and then a persistent outcropping of the opposing version.

It remained for the late Mr. Montgomery Schuyler to unearth from a contemporaneous newspaper the now well-known "Justice" letter.

This, from a spectator of the laying of the cornerstone, registered its protest against the absence of Mangin, and



BLOCK PLAN. McCOMB DECIDED THAT THE WINGS SHOULD "RANGE WITH MURRAY STREET" AND THAT "THE CUPOLA SHOULD RANGE WITH THE CUPOLA OF THE ALMSHOUSE." THE LATTER RELATION IS NOT INDICATED.

gave the record of his own picturesque zeal in causing a brass plate to be buried in the wall nearby, after having inscribed thereon in laudatory Latin the name of Mangin as "the real author of the plan of the new City Hall." He concludes thus: "And when the resistless hand of time shall have laid low the immense fabric, our descendants, in finding the stone, will also find the brass, and thus render to the artist who planned it, the justice he had a right to expect from his contemporaries. An old Italian proverb says, 'e meglio tardo chi mai.'" The letter had the editorial endorsement of the *Evening Post*, who had obtained "satisfactory reasons to believe it" (the letter) "is founded in too much truth." All this swung the pendulum sharply to the other direction, where, despite spirited attacks from the McComb partisans, it has remained to the present. It is only fair to say, however, that lovers of justice would welcome the discovery of further unassailable evidence in documentary form that might silence, once for all, the unseemly voices of factional quarrels, and place securely on record for all time the honor that belongs to him in whose mind grew the splendid conception which is now our City Hall. At any rate, the cornerstone was laid, all unaware of the accusations of bearing false, or at least incomplete, witness that were to be brought against it.

One is impelled at times to wish that modern newspapers might develop a hint of that conciseness that characterized those of 1803. The *Post* of May 27th of that year reports: "The cornerstone of the new City Hall was yesterday afternoon laid by the Corporation. On this occasion the regiment of artillery, several companies of Infantry, the Corporation and Gentlemen of the Bar formed a procession from the old City Hall to the Park where the ceremony of laying the cornerstone was performed in presence of a large concourse of spectators. The Mayor delivered a short and appropriate speech, after which a federal salute was fired." One might judge that the ceremonies were concluded at this point were it not for McComb himself who testifies through his *Diary* that the Mayor, on

laying the stone, gave one hundred dollars to the workmen, who were then invited to partake of "a handsome Collation," with "plenty of drink." The builders fared even better. They all "suped with a part of the Corporation at the Alms House—had an excellent supper—plenty of good wine. We staid till one o'clock a. m." Incidentally, one notes that closing hours have not materially changed since McComb's day.

We have passed lightly over the months that led up to these gatherings. They had been busy months for McComb, for the City Hall had not escaped those vicissitudes that have ever been corollaries of monumental municipal building projects. He had been called upon to present revised plans at a reduced scale, cutting down the building by two windows in length, two in the projections, and one in depth; to present an estimate on the saving thereby effected; to visit and evaluate quarries from Philadelphia to New Rochelle; to pass judgment upon their products; to calculate the comparative costs of brownstone and marble, and various combinations of the two; to choose the precise location for the building and mark it out; finally to acquire lease of one quarry which was to furnish the brownstone for the basement.

These months too had given him opportunity to display something of that sound judgment, resourcefulness and general competence which were amply proven later on. In placing the building he studied it carefully in relation to its surroundings. The Park was to give adequacy to its main approach. It should be flanked on the one side by the bridewell, on the other by the jail. Its wings were to "range with Murray street on a parallel line with the fence in front of the Alms House" and the cupola was to "range on a line with the cupola of the Alms House."

In leasing the quarry he showed a shrewdness that would incline one to look for his ancestry in New England rather than in Maryland. To quote the *diary* once more—"I have engaged the quarry in my own name and would wish it should not be known otherwise abroad,

as I am certain I can work it much more economical."

It was doubtless due to McComb's influence, persistently applied, that the Committee retracted its decision as to a reduction in the length of the plan. Ultimately they reported that "after consultation with the chief architect they are of opinion that the full length of the building ought to be preserved agreeable to the original plan as being more conformable to the strict rules of architecture, which in a building of such magnitude is of primary importance."

So too, in the matter of materials, McComb's guiding hand may be plainly seen. The walls of the new building were now officially decreed to be of brown freestone. The first committee had reported in favor of Stockbridge marble, only to be promptly overruled, their report rejected, themselves as a Committee discharged, and the cheaper material at once approved by the new Economy Committee. But civic pride was not to be so readily crushed. The marble idea would not down. Thus, in September McComb reports finding some of the members more in favor of marble than they were, and in October he was dispatched on the first of those numerous, oftentimes arduous, journeys to the marble quarries of West Stockbridge.

The success of his expedition, and a fortnight's deliberation after his return, brought the committee to the point of submitting that thoroughly characteristic and oft-quoted report:

"It appears from this (the architect's) estimate, that the difference of expense between marble and brown stone will not exceed the sum of forty-three thousand seven hundred and fifty dollars, including every contingent charge. When it is considered that the city of New York, from its inviting situation and increasing opulence, stands unrivaled; when we reflect that as a commercial city we claim a superior standing, our imports and exports exceeding any other in the United States, we certainly ought, in this pleasing state of things, to possess at least one public edifice which shall vie with the many now erected in Philadelphia and elsewhere. It should be remembered

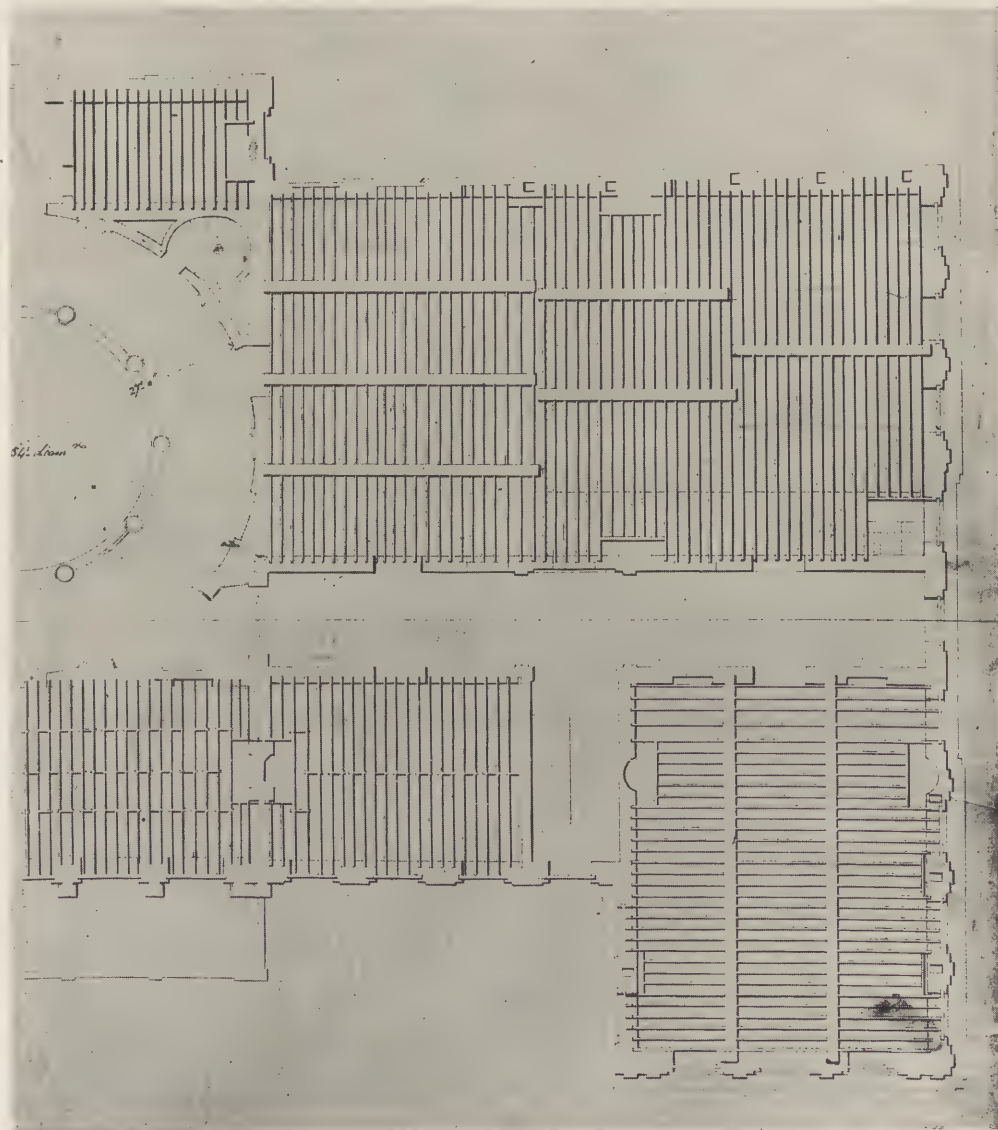
that this building is intended to endure for ages; that it is to be narrowly inspected, not only by the scrutinizing eyes of our own citizens, but of every scientific stranger, and in an architectural point of view it, in fact, is to give a character to our city. The additional expense of marble will be fully counterbalanced when we recollect that, from the elegance and situation of this building, the public property on the Broadway and Collect will much increase in value, and that the same influence will be extended to property far beyond these limits, and that in the course of a very few years it is destined to be in the center of the wealth and population of this city. A building so constructed will do honor to its founders, and be commensurate with our flourishing situation. Under these impressions, the Building Committee strongly recommend that the front and two end views of the new Hall be built with marble."

This quotation is further interesting because of its relation to that tradition that while the "front and two end views" were made of marble, the rear (they argued) might well remain of brownstone, since no one would be likely to notice the north side, situated so far uptown. After any sober consideration this must appear more picturesque than accurate. As a matter of fact, the city was at that moment settled, sparsely to be sure, up to Chatham Square, and beyond; the Alms House was directly north, and in this very report the committee prophesy with all assurance "that in the course of a very few years it (the City Hall) is destined to be in the center of the wealth and population of this city." In the face of these facts it is hard to understand how the tradition could have gained such power and momentum, yet it is this very bit of color that nearly all writers have hit upon and snatched up. Thus, John W. Francis, M.D., LL.D., writes in 1857: "So circumscribed, at that time was the idea of the city's progress, that the Common Council by a slender majority, after serious discussion, for economy's sake, decided that the postern part of the hall should be composed of red stone, inasmuch as it was not

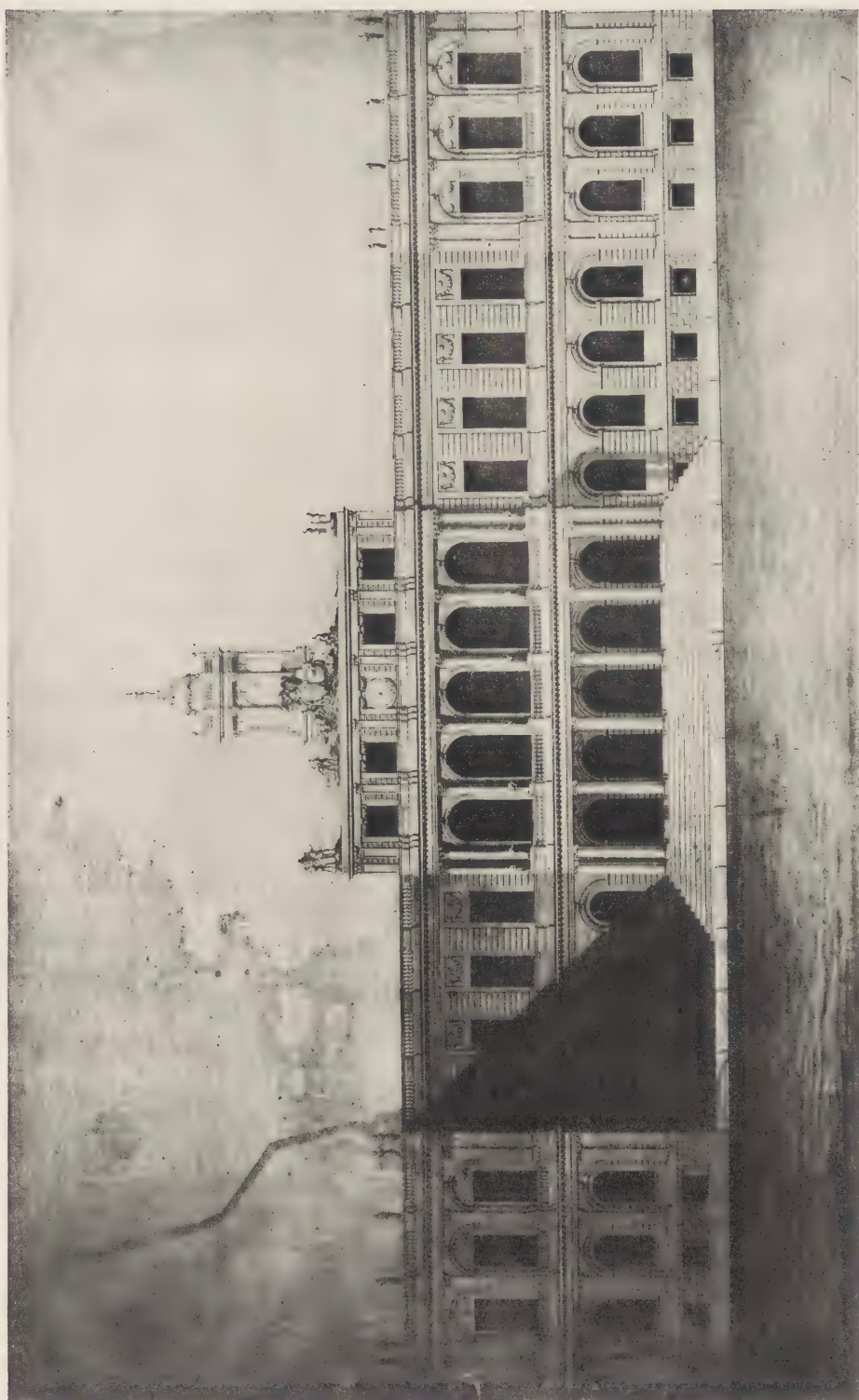
likely to attract much notice from the scattered inhabitants who might reside above Chambers Street." It is evident that Mr. Francis had had no occasion to consult the city map of 1811, which shows streets laid out up to 150th Street on the gridiron to which we are still enchaind.

More remarkable still, inasmuch as Mr. E. S. Wilde tells us that the Committee report quoted above was in Mc-

Comb's handwriting—comes this statement from Wm. E. Dodge, in an address delivered in 1880: "Some thirty years ago there resided near me an aged gentleman of the old school, Mr. McComb, who was the architect of the City Hall and who told me that in making the estimate of cost of the building, they found that the difference between marble and stone for the rear would be \$15,000. As it was so far up town that but few



FRAMING PLAN, EASTERN PORTION AT SECOND TIER, SHOWING LONG SPANS FOR THE OAK GIRDERS.



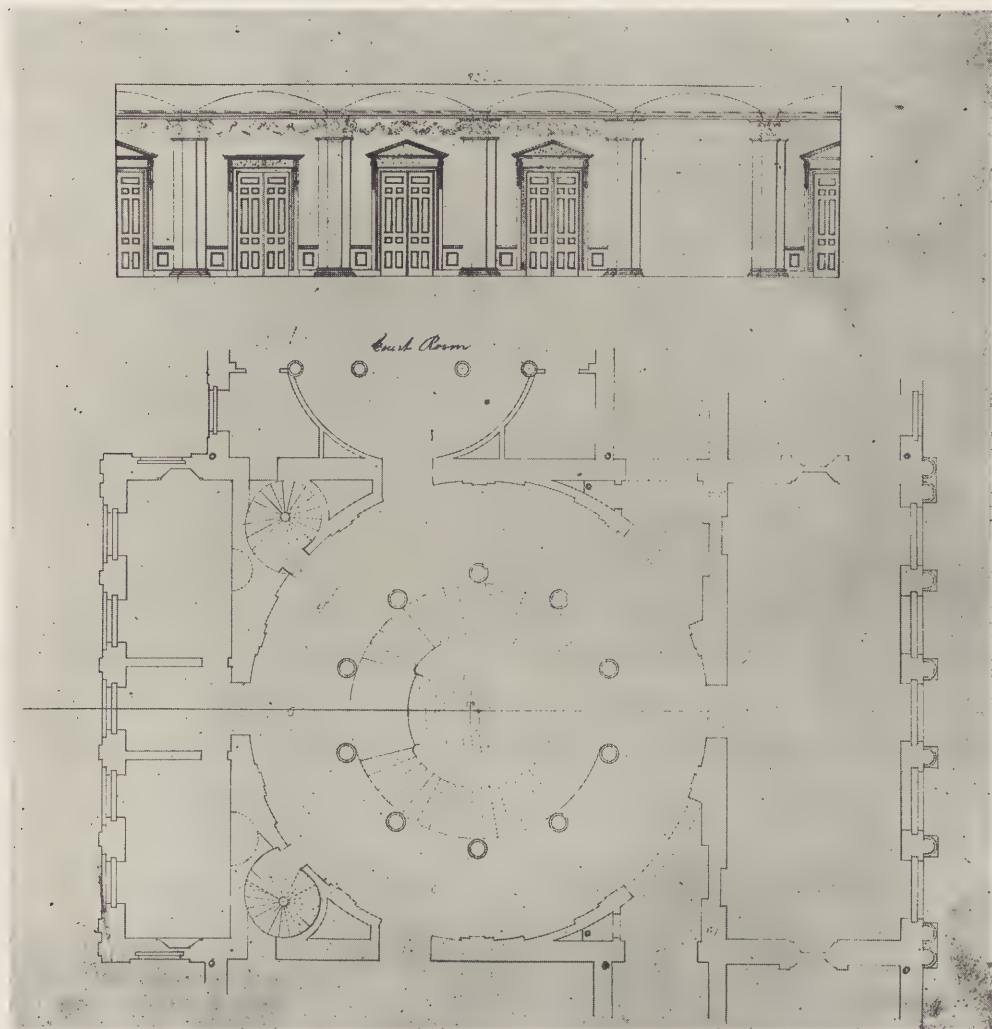
FRONT ELEVATION, SHOWING THE FIRST IDEA
FOR THE POSITION OF CLOCK, AS WELL AS THE
SCULPTURAL TREATMENT NEVER EXECUTED.



WEST ELEVATION, ACCORDING TO THE "DIMINISHED PLAN," WHICH WAS EXECUTED.



CROSS SECTION, ACCORDING TO THE ORIGINAL PLAN, WITH EIGHT COLUMNS IN THE ROTUNDA AND THE GREATER PROJECTION OF THE WINGS.



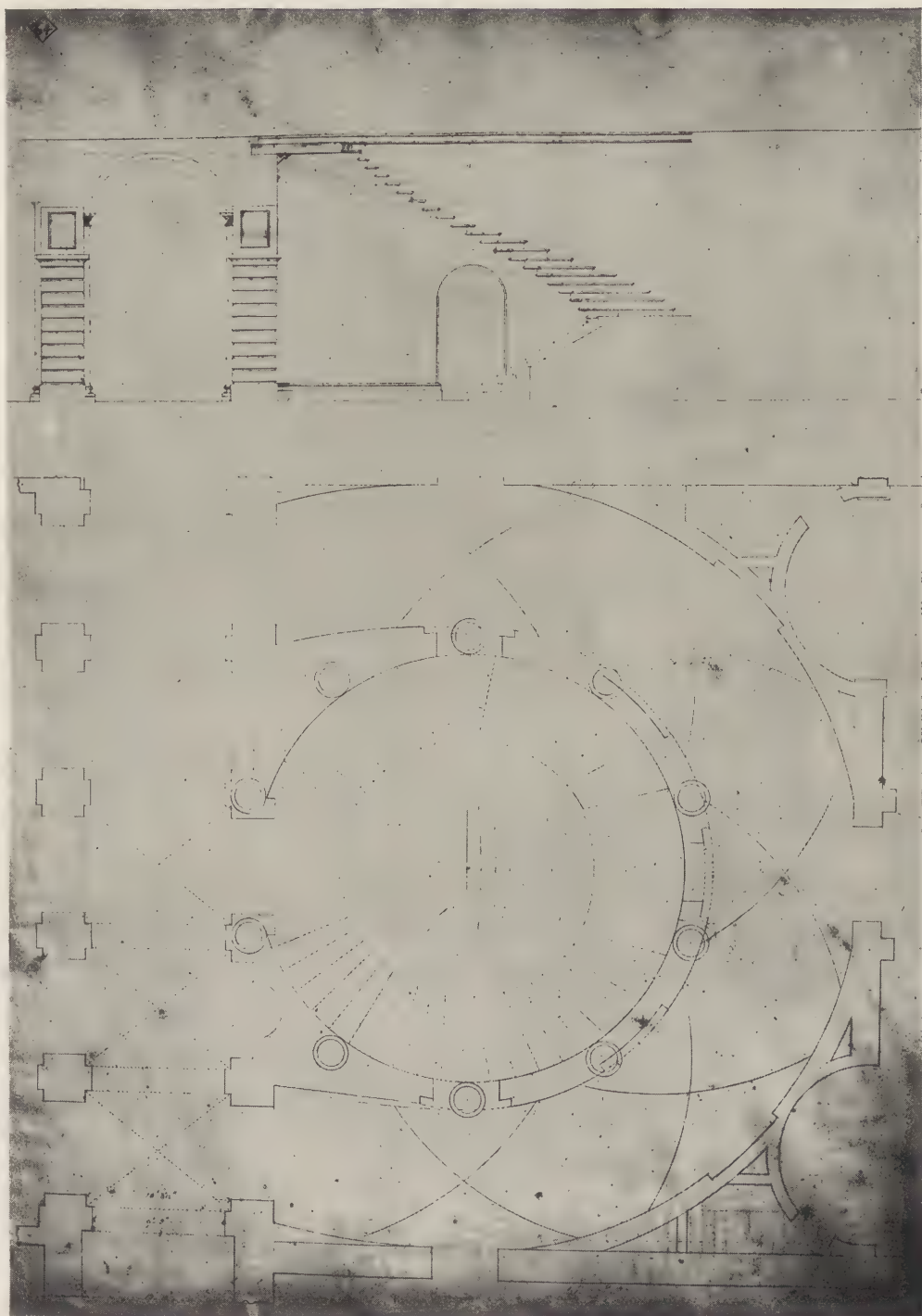
SKETCH FOR ROTUNDA TREATMENT.

would see the back part of the Hall, they decided to use the brown stone." Logic would seem to point the conclusion that the real reason for curtailment was that of economy and that the northern or "postern" part was chosen for the meaner material, inevitably since it *was* "postern," and not because of any supposedly "furthest north" isolation.

The materials selected, dimensions decreed, the cornerstone laid, construction work began in good earnest. Just as promptly began to appear the hardships which were to try very sorely the temper of builders and architect alike.

That first summer yellow fever made its annual descent upon the city, scattering the workmen, and compelling McComb to remove his own family to Bloomfield. No mention is made, however, of McComb's taking even a vacation. His troubles were in getting the masons to lay the stone walls according to his own ideas of solidity. Just how adamantine that was is doubtless best known to those who in late years have essayed to pierce those same walls with modern steam pipes, electric conduits and what not.

On October 29th (it is still 1803) he



STUDY FOR ROTUNDA. SECOND FLOOR
PLAN SUPERIMPOSED ON FIRST.



THE PORTICO, NEW YORK CITY HALL.

stops to note "this day the Hon. De Witt Clinton was sworn into the Mayor's Office." Evidently as a celebration of the event, McComb "had the pleasure to take a glass of wine with the members of the Corporation." The pleasure was not unmixed, however, for he adds, somewhat piqued: "The new Mayor took no notice of any of us concerned about the building." One judges that up to the end of November McComb had received nothing for his services, for at that time he writes: "I made up my account for services and expenses from the 10th of March to the 26th inst. I should have commenced my Pay sooner as I was waiting on the business for a long time before, but as there was no particular time set in the agreement I thought they might grumble to begin the Pay so early." Just then, too, he returned from a ten days' journey to the quarry, to find the workmen all discharged for the winter by the Building Committee. Irate but undismayed, McComb took the Committee in hand, with the result that two days later twenty of the best stone cutters were re-engaged for the winter months, and thereby insured as a nucleus for the next summer's organization. This incident helps to explain the seeming hardness of McComb's heart when he writes: "urged the propriety of appointing a permanent Committee—as we already begin to feel the bad effects of a Committee who have no judgment."

With all things thus pointing to this remarkable last century architect as a paragon of every constructional virtue, it comes almost as a relief to find his human fallibility proven by his own hand. Witness this from a letter to the quarrymen referring to his own list of the marble sizes for cutting: "Some of the pieces are not quite the size they ought to be, therefore please to look on this instead of the first bill."

Nor was it always over the draughting board or with the workmen that McComb's professional duties kept him engaged. "Architect" in that day implied much that had slender relationship to architecture. "Went to Newark," he says, "put up bills for the sale of the

Quarry and also sold the Brown horse for \$30.00, payable on 1st of January next." Further, "The bridges on the road and turnpike (over which the Stockbridge marble must be dragged) are very bad, and the Directors of the turnpike threaten to prosecute them if they damage their bridges. To encourage them I gave them ten dollars toward strengthening them."

So the crowded months passed and became years as the building slowly shaped itself. The summers came, and with them the fever; the winters closed in to bury quarries in snow, and to wear out the six-horse teams that struggled through the drifts dragging the marble toward the shores of the Hudson; hard times came to cut down wages and curtail appropriations; the city's finances became so straitened that they begged permission from the state legislature to raise \$100,000 by lottery; prosperity gradually returning, caused booms in other building projects, and created scarcities of labor; workmen struck for higher wages, threatening a general upheaval of the local building world; criticisms cropped up now and again, requiring refutation; the quarrymen fell into financial troubles, and must be helped out by the city; and always in the background, political considerations were present to play their part in the warping of judgments, the delaying of decisions, and the curtailment of appropriations.

Since "progress photographs" were not in vogue at the beginning of the nineteenth century, and since McComb's Diary is unfortunately discontinued in the midst of his connection with the City Hall, our picture of the building's progress must be gathered from the occasional reports made by the Building Committee to the Common Council. From such a source we learn that at the end of 1807, having expended about \$207,000, the walls stood at the level of the second floor window sills. McComb puts the blame for so slow progress squarely up to the Council for their meager appropriations, calling their attention to the fact that \$7,000 per annum was being paid to superintendents who could



THE PORTICO, LOOKING WEST.
NEW YORK CITY HALL.

"with equal facility oversee three times the number of workmen without added expense to the publick." A year later (Dec., 1808) the amount expended amounts to \$247,163, and the program calls for the building to be "completely roofed in the course of the following year." Hope continued to outrun performance, however; as the close of 1809 shows expenditures of \$273,916, and again the commentary—"we may indulge the pleasing idea of seeing nearly the whole of the outside work completed the next season." This "pleasing idea" was near to realization, as Nov. 1810, shows the finishing of a Common Council Room, one for the Mayor, Clerk and Comptroller to be "all progressing." Yet in December, "the season being so far advanced, the Committee propose leaving the building with a good shingle covering to secure it from the weather this winter and lay the copper in the spring." This, by the way, was the famed copper roof imported from England—a fact which seems remarkable to us in the year 1916, and doubly so since its cost (about \$10,000) was less than that contemplated by the Committee.

As everyone knows, the year 1811 had come before the City Hall was ready for formal entry by the Corporate officials, and then in the most piecemeal fashion. First, a modest 4th of July celebration in the Mayor's Room by the Common Council, probably no more than a roll-call and inspection; a month later, their official occupancy of that office pending completion of their own chamber; in October, a visit of the Justices of the Supreme Court to select "the rooms most suitable to be finished for the accommodation of that court." Even then, and for months after, the building was far from finished. Indeed, as it stands today it is still incomplete, since the sculptural foil intended for the base of the cupola has never been erected. Thus it has been the hard fate of the City Hall, not only to remain permanently incomplete, but to have undergone from the days of its comparative youth a series of alterations, repairs and renovations which have ranged at various times from intelligent restoration to bar-

baric vandalism. Among the first important changes was the installation of the clocks in the cupola. This was accomplished, not by embodying the clock faces within the form of the original design, but by slicing off the upper half of the cupola, inserting the square box that contains the clock, and replacing on top the portion that had suffered decapitation. It would have been a sad commentary on McComb's powers as a designer had so slipshod a method of alteration worked no harm to the building.

The City Hall had almost immediately taken its rightful position as the center of the city's official life—the place for state receptions, for municipal celebrations and the like. As early as 1813 we find the Common Council passing a resolution "that in celebration of the brilliant and memorable victory achieved by Commander Oliver H. Perry on Lake Erie and the important success of General Harrison, resulting in a great measure therefrom, the City Hall of this City be illuminated on Saturday evening next from the hours of 7 to 10 o'clock." Here, too, in 1824 was held the elaborate reception to General Lafayette; here, a year later, was celebrated the opening of the Erie Canal; and here, in 1842, the City welcomed the first of the new Croton water supply.

This last appears to have been a most thrilling celebration, judging from a news report, such as this: "There was a multitude present that no man could number, and the devices numbered an almost endless variety. We could neither number the one nor the other. The procession was two hours and ten minutes in passing the "Express" office on Broadway. The ranks were from 2 to 10 deep. Every rank, every age and every profession was represented. The church bells mingled their merriest peals, and the cannon spoke out morning, noon, and night in their most vociferous tones of power. It was a veritable water day: no wine or spirits of any kind were served."

These occasions were memorable and their mode of celebration harmless, but when in 1858 the successful laying of



DETAIL AT SECOND FLOOR, SOUTH FRONT.

the Atlantic Cable must have fitting recognition, the celebration spelled disaster for the City Hall. A stray spark from the official fireworks did its evil work, and the next day the City Hall stood shorn of its cupola, its dome disfigured, its roof timbers blackened and charred. Here again careless or stupid restoration work left its marks in the contraction of the opening at the eye of the dome, with the result that until its re-widening in 1913, the splendid rotunda, robbed of its light, was rendered dull, cavernous and dismal.

In more recent days, natural expansion in the municipal governing plant and its physical requirements have forced numerous shifts among the office forces and consequent alterations in the building itself. Furthermore, periods of notorious political corruption are not likely to be coincident with those of sensitive architectural appreciation in official circles. So the City Hall was called upon to pass through dark days of desecration

—some one has termed it “the tobacco juice period”—during which the building became more and more tawdry and ill-kempt.

The picture given by the historian is most depressing. “No one (he says) seemed to care for the architectural improvement of New York. The City Government had left its only fine building—the City Hall—in a condition of ruinous neglect since the cable celebration, when it had suffered from fire. Its front was blackened with smoke, its windows closed up with boards, its whole appearance saddening and repulsive.”

Then, too, the City Hall has been racked and tortured through the unfortunate but innocent exigencies of modernity. In 1812, fireplaces furnished the only heat, and the rooms must have been thoroughly frosty some winter mornings, for the Common Council had decreed that “all persons occupying offices in the City Hall be requested to see the fires carefully extinguished before they

quit their offices for the day." Now, of course, steam pipes spread in a network from one end of the building to the other, and from top to bottom. So with the innumerable plumbing pipes increasingly in evidence; so with the conduits for electric lights; so with the myriads of wires—telephones, call bells and what not—that a few years since stretched sprawling over every part of the building, unmindful alike of traditions from the past, and amenities of the present.

But these are sins committed during Dark Ages which intervened between McComb's day—a period of almost classic simplicity, and our own—a day, we

trust, of renascent reverence for the worthy in architecture. We can hardly hope to approach the naivete, but it might perhaps be well if we could regain some suggestion of the child-like spirit of unabashed enthusiasm that inspired, back in 1819, this gem of rhymed vers libre:

"And on our City Hall a Justice stands—

A neater form was never made of board—

Holding majestically in her hands

A pair of steelyards and a wooden sword,

And looking down with complacent civility,

Emblem of dignity and durability."



THE CUPOLA, AS ORIGINALLY EXECUTED.
NOTE McCOMB'S SIGNATURE.



DETAIL OF ENTRANCE—WALTHAM (MASS.) PUBLIC LIBRARY—LORING & LELAND, ARCHITECTS.



WALTHAM PUBLIC LIBRARY, WALTHAM, MASS.

THE PUBLIC LIBRARY AT WALTHAM, MASS.

— AND —

THE CARTER MEMORIAL HOSPITAL AT LANCASTER, MASS.

Loring & Leland, Architects

BY MARTIN MOWER

THESE two buildings by Loring and Leland may properly be considered together. Interesting in design and plan, they contrast admirably in treatment, although done in the same general style.

The library, planned with the help of the experience of the librarian to give the greatest freedom of use to the public with least cost of supervision and upkeep, is Colonial in type, built of brick and limestone, a story and a half high. Good placing on its lot and a lift on delicately judged grading have helped, however, to give it a sense of height; this is added to by the design of the facade—a balance of two wings on a slightly advanced middle portion, which is filled for nearly its whole width by a limestone pillared portico rising the full height of the building. The eye is irresistibly swept upward by the pillars; and high arched windows, three in each wing, aid in the illusion of greater vertical meas-

ure than the structure possesses. The ends of the wings have each a Palladian window as the main feature of well worked out problems, slightly differing in that one includes a basement door and the other merely two small basement windows. The rear of the building is clean cut and business-like.

Considered in detail, the exterior gives ever increasing interest on to delighted satisfaction. The mouldings, cornice, balustrade, and portico are pleasing from every probable point of view, from every possible point, it may be. The architects never rested satisfied with what looked well on paper in elevation or thrown up in architectural perspectives, but had a quarter scale model made and colored. The curve of the roof on the portico, apparently so inevitable, so easily swung in, is in fact the outcome of a series of deliberate, delicate experiments to determine the precise amount of the circumference of a circle which would ap-

pear, seen from below, as a semicircle. The front entrance is charming with its interestingly paneled door and leaded light surmounted by a delightful bit of bravura in the boldly curved broken pediment and garlanded flaming urn. The effect, together with the swinging arc of the balustrade crowned portico and its columns, creamy pale against the darker red, brick wall, is of extreme graciousness, from which the balancing curves of the two descending sweeps of steps and the light iron railings, lace-like against the sturdier forms, detract nothing.

In the capitals of the pillars of the portico, the lower part of the abacus block seems to have become circular in plan leaving a rather thin, rectangular slab with moulded edges to receive the load; which might not have done in the days when columns worked harder.

In the wings, the tall, iron-balconied arched windows are well spaced in relation to the areas of plain brickwork, and set in two orders of brick arch, the outer accented by keystone and skewlocks in limestone, which although relatively small have a great deal to do with the enlivenment of the front. The basement windows and two small ones besides the door are unobtrusive. The whole is topped off by a balustrade kept from dullness by interruptions of closed panels. The Palladian windows at either end section are well handled; and a look of being well knit into the structure is given by springing an elliptical relieving arch over the three divisions and filling the somewhat sunken spandrel with bricklaying of a character differing from that of the rest of the wall surface.

The section on the west containing the children's door is most competently trim in arrangement of rectangular spaces of wall, openings, panel cornice and string course.

The rectangular window openings of the rear are nicely spaced and leave agreeable enough areas of brickwork, relieved under windows by plain panels the width of the window and about one-half that measure deep, contrived by slightly advancing several courses of bricks.

Iron railings of steps, portico, edge and balconies are crisp and simple. Slender verticals rise to a horizontal border where every other one is cut out, leaving small panels for pleasing ovals. The urn-shaped knobs of iron give accent to top of rail at terminations of stretches of rail. The panels of diagonally curving lines occurring at like points are not so happily thought out. The large balconies of the Palladian windows of the ends, have a vertical oval well filled with a "W" opposite the middle windows.

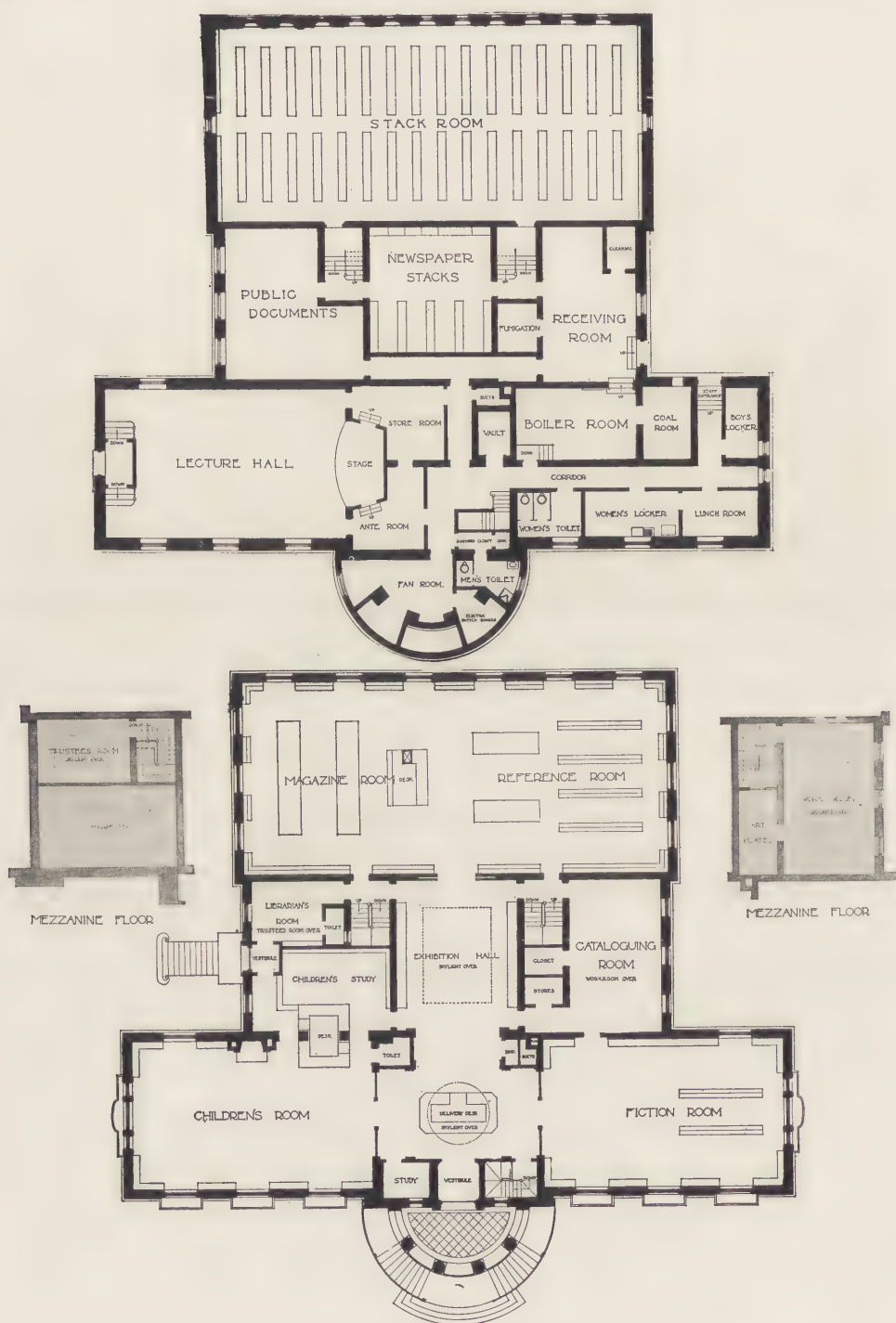
A peculiarly refreshing quality felt in the tonality of the exterior is by no means fortuitous. To get this agreeable sensation of tone in the brick work alone, no less than four elements were brought into play; value contrast, vibration of color, light and shade, and amount of light and dark. The bricks carefully chosen are of two kinds, the greater number being in variation from violet red to reddish orange. These used together give a livelier tint than could be got by an even mixture of the averaging red. The rest of the bricks are darker, in variation of olive browns and greens. They are all rough enough in surface to catch light and shade. These bricks are laid English bond, headers and stretchers, with joints of a pale grey rich textured cement which are "struck" to give further play of light and shade over the resulting ridges. The stretchers are all of the red bricks, but among the headers the ends of the dark olive green and brown bricks are used at intervals varying in count from six to nine, the average being seven. With all this care there is made up a mixture of visual stimulants which quickens and refreshes the eye whether it dwells on or passes over the wall spaces.

At the east and west ends of the front a pleasing variation in the brickwork is managed by bricks laid to form an elliptical relieving arch with a filling in the spandrels of headers only, among which the dark bricks occur in occult harmony of interspace. An average distance being kept between the variation of the occurrences.

It is only when handled by well



WALTHAM PUBLIC LIBRARY, WALTHAM,
MASS. LORING & LELAND, ARCHITECTS.



MAIN FLOOR AND BASEMENT—WALTHAM (MASS.)
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REAR VIEW—WALTHAM (MASS.) PUBLIC LIBRARY.
Loring & Leland, Architects.

trained designers that these variations become agreeable subtleties and not affectations of disorder.

The limestone is light creamy buff, free from muddy or dusty quality. Here again extreme care was taken, no risk being run with descriptions or general specifications. An agent was brought on from Indiana to Boston to see what would be accepted and to look at two examples of buildings, both of limestone, under the same specifications, the one good to look at and the other cold.

The interior, on entering from the main door and vestibule, shows itself as a sunnily lighted T-shaped hall, with the Delivery Room at the crossing. The Fiction Room, and the Children's Room, separated from the Delivery Room only by large panelled clear glass screens, occupying each an arm, respectively to right and left; and the exhibition hall in the stem, opening clear, but for an accentuation of narrowing by a slightly brought forward section of wall with pilaster.

Beyond, at the end of the Exhibition hall entered through double valved leath-

er-covered doors, is the Reference Room, parallel with the arms of the T. At the right of the Exhibition Hall, and opening into it by a door at the Delivery Room end, is the cataloguing and work room; also stair descending to stacks. On the left are the Children's Study, the Librarian's private office and various closets, passages and stairways. In a mezzanine story and lighted from the roof there is a cozy Trustees' room with its collection of medical books not open to the general public.

The precise arrangement of these rooms is shown in the main floor plan. The basemant plan shows the disposition of the stacks, the Study room, the Lecture Hall and the positions of the boiler room, various store rooms, retiring rooms, corridors, stairways, etc.

Supervision of the three public rooms most needing it, is clearly to be managed with utmost economy from the Delivery Desk. A desk between the Children's Room and Study gives control of both. A third desk in the Reference Room controls that, and is connected by a book lift with the stacks below.



END WINDOW OF FICTION ROOM—WALTHAM (MASS.)
PUBLIC LIBRARY. LORING & LELAND, ARCHITECTS.



CHILDREN'S ENTRANCE—WALTHAM (MASS.) PUBLIC LIBRARY. LORING & LELAND, ARCHITECTS.



DELIVERY HALL, LOOKING TOWARD FICTION ROOM—WALTHAM (MASS.) PUBLIC LIBRARY.
Loring & Leland, Architects.

The Library is a model of compactness for work and administration. The users on entering, turn, as usual in America, to the right. The space between vestibule door and desk seems narrow, but was so called for by the staff. The user then passes on, if only to glance at the daily newspapers most in demand, to the racks above benches against wall of the Delivery Room. Readers of fiction and such books of reference as cook books, nature study, and the like find the door of the Fiction Room within a few steps. More serious readers and students pass on to card catalogue and magazine shelves on right wall of Exhibition Hall or continue on through doors at the end to the Reference Room. This room is completely cut off from the bustle and chatter of the entrance, the Children's Room and the Fiction Room. The Children's Room, naturally noisiest, is completely shut off by the glass screen and has its separate entrance. The Fiction Room, in which much exchange of low voiced talk and much moving about goes on, is practically cut off by the glass screen.

The attendant at the Delivery Desk is near at hand to offer suggestions to those in pursuit of entertainment and diverting knowledge in the Fiction Room, to advise the inexperienced in the use of the card catalogue, to answer questions of the examiners of the exhibition in the cases in the Exhibition Hall; and meanwhile have an eye to the Exhibition Hall, and to the Fiction Room, and Children's Room, through the glass screens.

In time of rush of demand for books, workers in the Cataloguing Room can be summoned and in a moment's time step from the nearby door to the desk. In case of shortage of hands through epidemics of sickness in winter or of vacations in summer the Children's Room can be entirely run from the Delivery Desk by throwing open the door in the glass partition, and cutting off other entrances by silk cords. The stacks beneath the Reference Room are only seven feet in stud, which makes the descending stair so short a flight that possibility of promptness in delivery of books is assured.

Three rooms, the Lecture Hall, with



CHILDREN'S ROOM, LOOKING TOWARD DELIVERY ROOM—WALTHAM (MASS.) PUBLIC LIBRARY.
Loring & Leland, Architects.

its outside door, the Document Room, and the Study Room, containing the Public Documents, are available for lectures, student's debates, conferences, etc., and may all be used at the same time, being cut off from each other and from the reading rooms as far as noise is concerned.

There is plenty of room in the stacks and cases for the collection of books to grow. Filtered air, hot or cold, can be supplied to the Lecture and Childrens' Rooms. The circulation of air between the stacks is through slots along the edges of the floor of the upper tier instead of in the floor along the bottom of the shelves, allowing dirt to fall through on books below as in the old way. There is a complete system of inter-connecting telephones throughout the building.

The architectural features of the interior are well turned out and in good style. There is no redundancy, emptiness or ineptness. There has been no unintelligent following of precedent. Noticeable proof of this is in the slight increase in thickness of some members,

mouldings, window sashes and the like, over that of corresponding parts of Colonial examples. There results a sturdy look, an appearance of power, of resistance to the wear and tear of long hours of daily public use.

In the small marble-floored vestibule some neat use of reeding has been made about the door, and a simple meander happily inserted among the mouldings in the cornice. A finely proportioned doorway opens on the main axis of the interior, which is lighted from above by a flattened dome in the Delivery Room and by a skylight filling almost the entire ceiling space in the Exhibition Hall. The lights are of amber tinted cathedral glass, which with the pale yellow tints of the walls gives the noticeable sunny quality even on a dull day in winter to the floods of light.

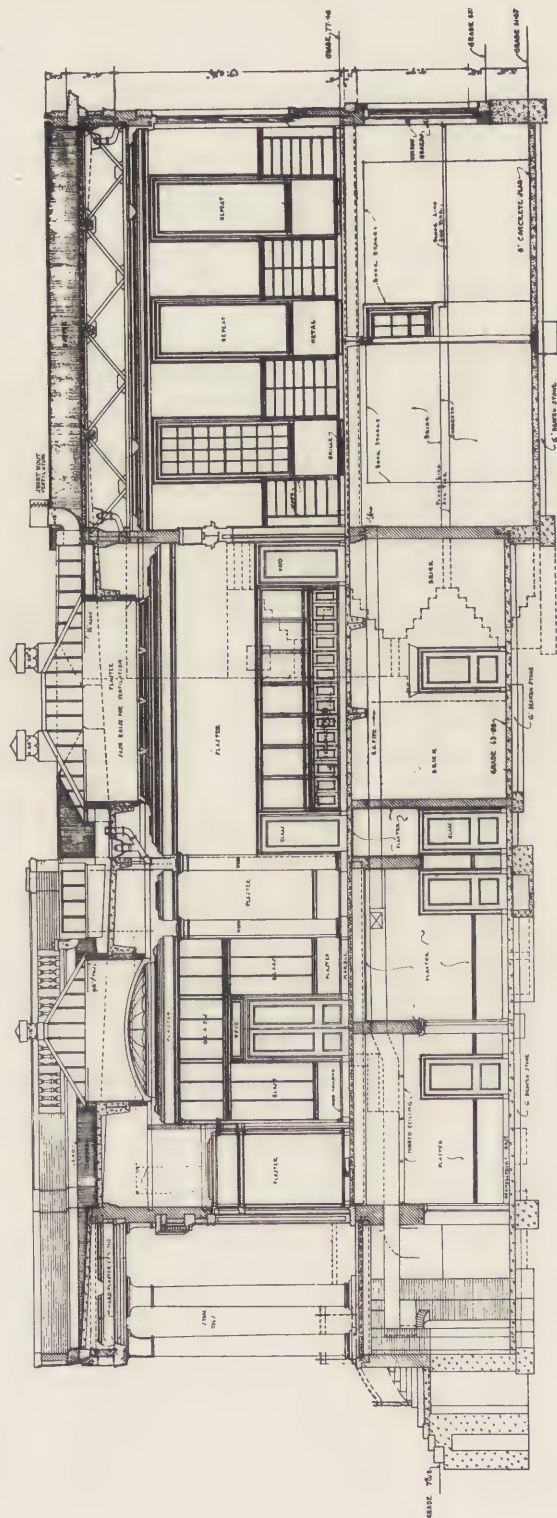
The flooring in the Delivery Room and Exhibition Hall is of grey clouded, yellow-white marble, and in the pavement the division between the rooms is differentiated by changes in the size, shape and direction of the laying of the slabs,

and by dark strips or bands of verd-antique. The Children's Room, Fiction Room and Reference Room are well lighted and sunned by tall windows, three facing south; white ceilings and pale tinted walls acting as reflectors. The floors are covered with a peculiarly grateful shade of greyish green linoleum, being a part of the last lot sent over from Germany, purchased before the building was started and held in storage till wanted.

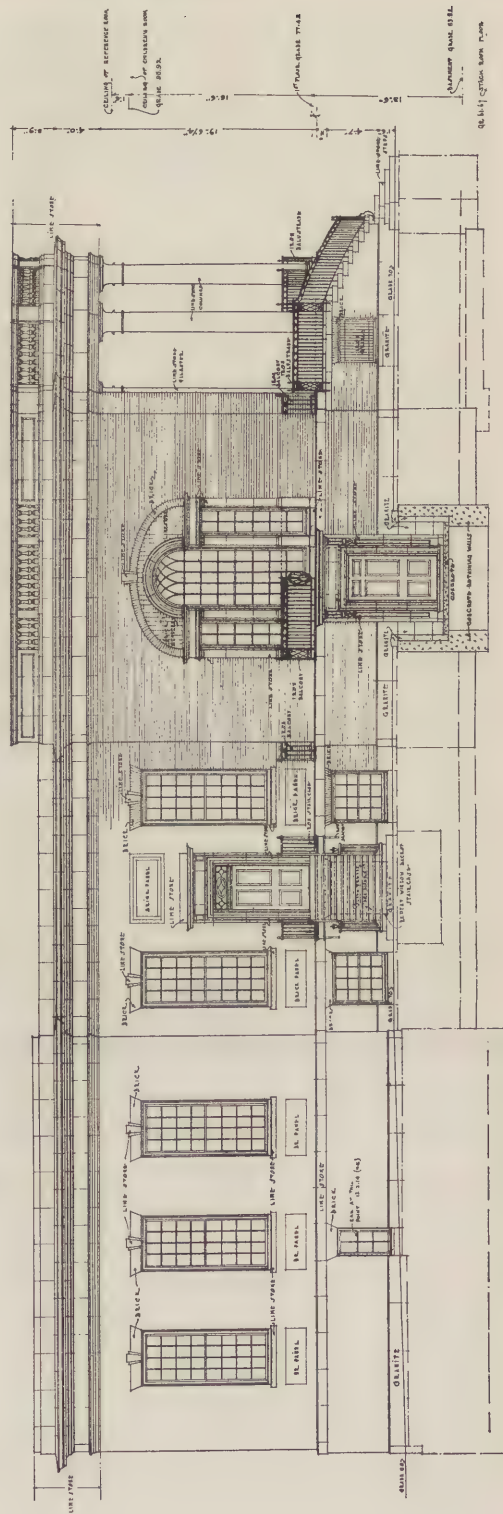
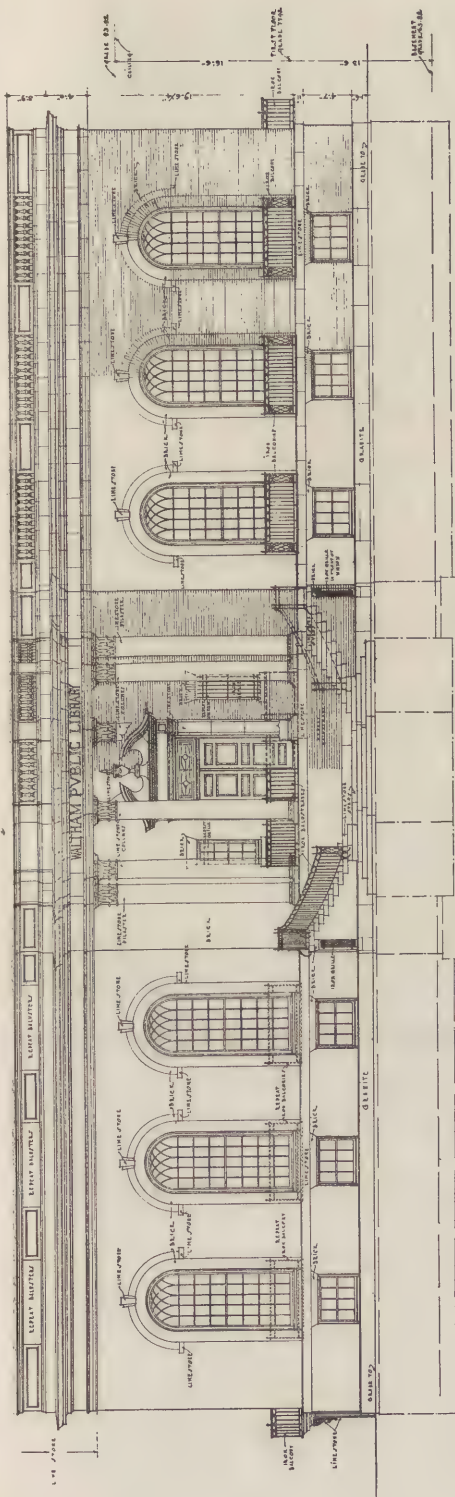
The screens of clear glass completely filling the openings to the Fiction and Children's Rooms have their large panels attractively arranged in groups of three. In the Fiction Room there is an interesting use of blind arch of wood with plaster intrados over the small door to the cataloguing room. It has the proportions and mouldings of the windows, and serves to balance the one opposite. The use of the Palladian motive in the opening between the Children's Reading Room and Study is ingenious, especially in relation to the desk, and passages at either side. The black marble mantel in the larger of the two rooms is very good in proportion.

The interior corner vestibule giving from the children's entrance to the Children's Study is an entertaining, if a bit ungraceful, working out of the problems of draughts, supervision and moulding, a semi-privacy for the entrance to Librarian's office door.

The laurel moulding on the ceiling of the Reference Room is most acceptable, and so is the Colonial motive in the cornices of the Children's Room and Study and the Fiction Room. A touch of graceful humor is given in the use



SECTION THROUGH ENTRANCE—WALTHAM (MASS.) PUBLIC LIBRARY.
Loring & Leland, Architects.



FRONT AND EXCHANGE STREET ELEVATION—WALTHAM
(MASS.) PUBLIC LIBRARY. LORING & LELAND, ARCHITECTS.



CARTER MEMORIAL HOSPITAL, LANCASTER,
MASS. LORING & LELAND, ARCHITECTS.

of the watch-faced clock with its garland over the door of the Exhibition Room to the Reference Room.

The arrangements for artificial lighting, heating, and ventilation are thoroughly well contrived, and sources of intense satisfaction to the staff. Unsightliness has been avoided and dirt gathering tendencies counter checked.

The electric light fixtures are in dulled gold. In the Delivery Room there are cylindrical lanterns, with cylinder glass protecting the light. In the metal lead lines of the bowls of the larger indirect lights in the Reference Room one feels a contrary motion and breaking up of areas into odd shapes brought about by the applied features. The smaller lamps have free hanging festoons of graded strings of little gilded balls, much better in effect.

The polished mahogany furniture is everywhere agreeable to the eye, particularly the movable bulletin boards with ornaments of carved pineapples. Throughout the building one is struck with the excellence of material and workmanship.

In the choice of colors for the tone schemes for the interior, the architects again show their discretion, taking as their greatest range never more than one-third of the spectrum. The chrome chord is orange, orange yellow, yellow, yellow green, green; but so reduced in intensity as only to be recognized in their subdued, but never dull or muddy tones, as cream, mahogany, verd-antique, pale sage, Roman gold, and the like. The large areas of wall, pilasters, ceiling, are in the higher values of the pale yellow and orange yellows, giving ample diffusion of pleasantly tempered light. Against these clean, pale tones, the dark clear orange brown of the mahogany comes out with much freshness of contrast. The linoleum flooring of most of the rooms, the lines of verd-antique in pavement, and the inconspicuous pale window shades give the green notes of the chord, which holds throughout a common note of yellow, and herein lies the secret of one element of the harmony of tone over the whole main floor.

The grounds slope away at the rear of



CARTER MEMORIAL HOSPI-
TAL, LANCASTER, MASS.

Loring & Leland, Architects.



REAR VIEW—CARTER MEMORIAL HOSPITAL, LANCASTER, MASS.
Loring & Leland, Architects.

the Library to give light to the stacks and are graded for automobile service. The design of the iron supports in the lanterns in front at each side of the top of the steps to the sidewalk is not entirely happily conceived. The less pleasing motive of the stair rail has been taken and developed into a four-sided open work upright in which there is confusion to the eye as the sides are seen through one another. Pointed evergreens are grouped with good effect in places against the walls and some shrubbery is already set out. A board box hedge waist high would be a charming but probably impractical addition.

Last, and by no means least, the Library was completed well within the appropriation.

The Carter Memorial Hospital at Lancaster, Massachusetts, is planned for tuberculosis patients, and the technical solutions of the problems of supplying the prime necessities, fresh air, sun, and antiseptic conditions, are quite evident in the accompanying reproductions from drawings and photographs.

The plan comprises in general two long one-story wings of wards, flanking a middle portion of two stories and basement, having on the ground floor a diet kitchen, a refectory, a sun room, and sundry lesser features, and, above, three private rooms with bath, and a nurses' bath. An office for the physicians and a visitors' room occupy each a small wing respectively to right and left. Seen from the outside the hospital is reminiscent of Georgian, with its central pavilion with symmetrically arranged long wings, in red brick, and wood, painted white. The forms of wooden construction are made evident whenever wood is employed.

The central pavilion has in front a two-storied porch roofed in by the projection of the gable, and enclosed on the ground floor by filling the spaces between the pillars with broad, arched windows. The arches of these windows are repeated by the little semi-circle of the window in the gable and again by the arches over the fanlights of the balancing doors of the two small back wings. These wings are advanced beyond the



FIREPLACE IN DINING ROOM—CARTER MEMORIAL HOSPITAL, LANCASTER, MASS.
Loring & Leland, Architects.



SUN PARLOR—CARTER MEMORIAL HOSPITAL, LANCASTER, MASS.
Loring & Leland, Architects.



PIAZZA—CARTER MEMORIAL HOSPITAL, LANCASTER, MASS.
Loring & Leland, Architects.

long wings almost into the plane of the front of the central pavilion. They have around these tops a light wooden rail of rectangular posts with a filling of slender diagonal cross bars in the panels between the posts and the top and bottom rails. The railing is repeated on the upper porch. There is a plainly paneled wooden parapet on the front of the long wings. This completes the sober ornamentation of the building. The effect is nevertheless light and cheerful.

One is left in no doubt as to an economic or hygienic reason for every feature in the construction. The wide door windows opening on the broad porches allow the patients to be wheeled out in their beds for the fresh air cure, in any but the worst weather. The glazed lower porch of the middle portion allows of sheltered sun treatment. The unusual row of small windows just above the roofs of the porches of the long wing is cleverly managed to admit sun to the wards from which it is otherwise cut off by the necessary porch roofs. Every room has a cross draught.

There are in each wing three wards and two larger rooms intended for patients in the more advanced stages of the disease.

The mouldings, electric light fixtures and the like, are designed to catch as little dirt as possible, and to make its removal easy. This is especially noticeable around the fireplace, over which is the memorial tablet.

The radiators have a very useful contrivance by which fresh air from out of doors may be admitted to be warmed and distributed or cut off on very cold days to allow of reheating of air from the rooms.

The furniture, beds, bed tables, metal lockers, bedside chairs, bureaus, etc., are sanitary in type but agreeable in their spotlessness. In the Sun Room there are pillar-legged tables and spindle-backed wooden seated chairs of good Colonial design.

The interior, as may be seen in the photographs, is light and pleasant. The Sun Room indeed is quite uncommonly cheerful.

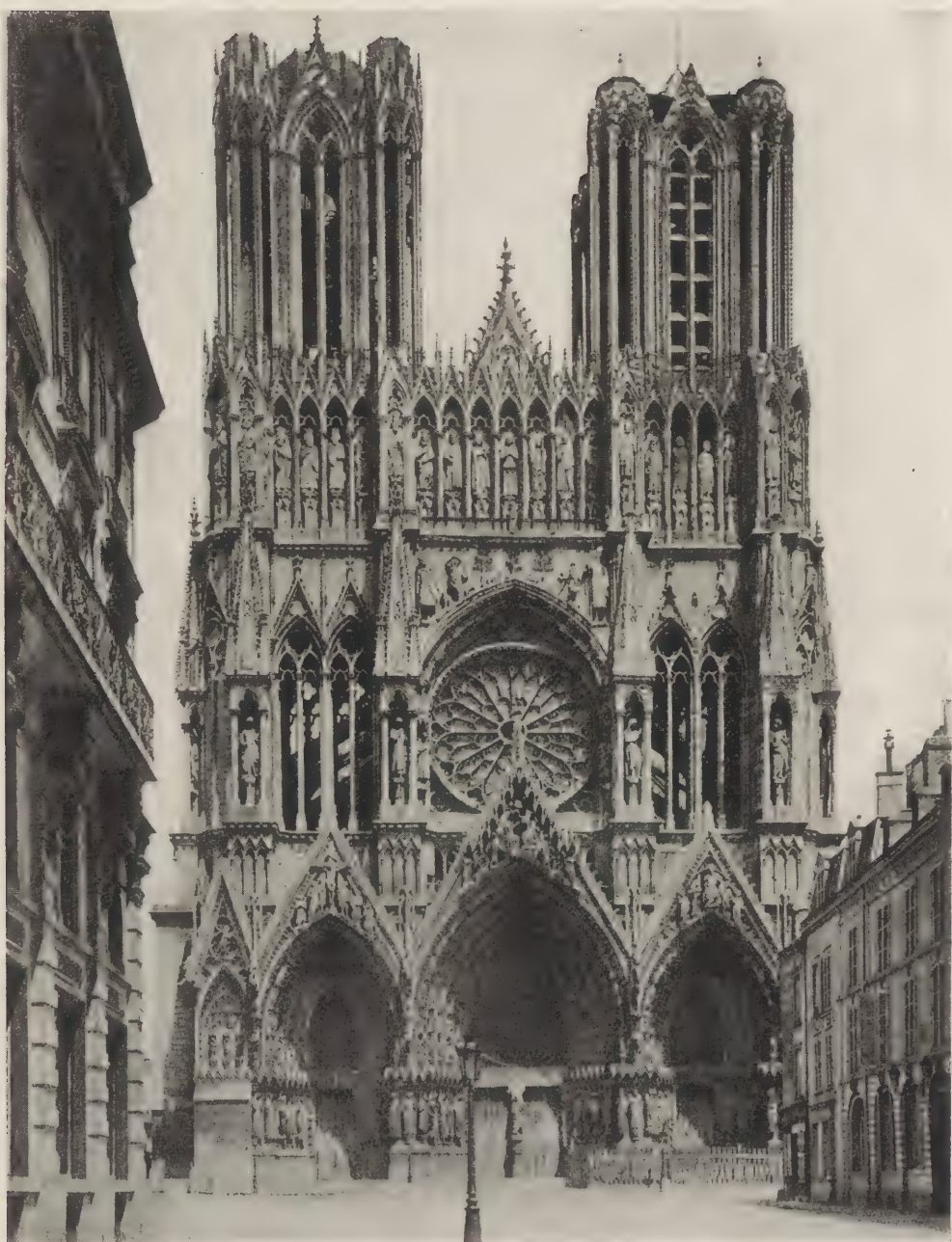


FIG. 1. REIMS CATHE-
DRAL: WEST FRONT.

Gothic Architecture and Its Critics

By A. D. F. Hamlin

Part I The Lure of Gothic

GOthic architecture is a subject of universal and perennial interest.

No other style exercises so potent a fascination upon the layman and the tourist, the architect and the painter, the ecclesiologist and the student of history; upon men and women of every rank and occupation. The cold perfection and finality of Greek art, the imperial grandeur of the Roman, the internal splendor of the basilican and Byzantine churches and baptisteries, the exquisite decoration and the sensuous beauty of the monuments of the Renaissance—all have their partisans; but for every one of these there are ten who read, study and wax enthusiastic over the monuments of Gothic architecture. The outpouring of books on these monuments shows no sign of dwindling; the English are especially prolific of such works, mainly designed for a highly intelligent and discriminating non-professional public, and Americans, though remote from the monuments of that art, have produced works of the same class quite worthy to stand with the best of the English productions.

A bibliography of Gothic architecture would cover many pages. There are in the Avery Library of Columbia University much over a thousand titles of works dealing with this subject in French, English and German. Any review of the criticism of Gothic architecture within the compass of two or three magazine articles must necessarily confine itself to a very few typical works, fairly representative, each of a class, in the great body of such literature.

I beg my patient reader to note this disclaimer of comprehensive and exhaustive treatment. Pray let him not, at the end of this article, fling at the devoted author the complaint that such and such a learned writer on Gothic architecture has

not received the tribute even of casual mention. Should he indulge in this fling, I should have to content myself with the old plea of confession and avoidance, or a *non volo contendere*.

II.

In order to understand both this architecture and its treatment by the literary critics, it is proper to inquire into the reasons for its extraordinary popularity. Some of them lie on the surface. The number, size and splendor of the monuments themselves are such as to impress even the most casual traveler. The majority of these monuments, moreover, are not only conspicuous by their situation, the loftiness of their dominating spires, and their impressive dimensions, but they are also the most public of all buildings, open to every comer seven days in every week. They still serve their original purpose—the worship of God, and the majesty and beauty of ancient rituals blend with the splendors of their architecture to produce a profound emotional impression. Behind and above all these influences is the intrinsic esthetic appeal of the buildings themselves, with their “long drawn aisles and fretted vaults,” their storied glass and naïve sculptures. For many souls also their antiquity, their religious and historic associations, the part they have played in the great movements out of which our modern civilization has grown, mingle their appeal with that of the material and visible structure.

There are, moreover, in the architecture we call Gothic, two qualities in which it surpasses all other styles—*mystery* and *variety*. In the monuments of classic antiquity and of the Renaissance there is majesty, beauty of detail, color and decoration, splendid sculpture and the glamour of religious and historic associations; but they lack mystery. They explain them-

selves, as it were, on first view. The Parthenon in its simplicity of plan and organism is final, complete, obvious, self-contained. The Pantheon is superb in its ineffable majesty, but its system, also, is devoid of complexity. So is that of the basilicas, and even, though in less degree, that of St. Paul's in London, or St. Peter's at Rome. A palace like the Louvre or the Vatican is, indeed, vastly complex; but every one of its parts—all that is visible at any one time—is obvious and self-explanatory. Not so the Gothic cathedrals! The pattern of the plan may appear simple on paper, but the building itself is a vast and fascinating marvel of complex parts. Piers round and clustered, arches wide and narrow, perplexing intricacies of tracery, soaring vaults, pointed pinnacles and flying arches constitute a colossal organism in which one feels that each part has its function; but the parts are so many and so various that the layman is at once fascinated and filled with wonder. What is the meaning of this bewildering marvel of construction? what is its recondite symbolism? how did such buildings come into being and why are they so different from all other kinds?—questions like these arise more or less consciously in every thinking mind upon the contemplation of Notre Dame* or Reims or Amiens or Canterbury Cathedral or Westminster Abbey. Hence the multitude of works to explain the mystery, proportionate to the number of those who, having felt it, desire to fathom its secret. Indeed, it was in answer to the actual host of inquirers and inquiries encountered in his official duties that a distinguished prelate of the Anglican Church published last year a charming little volume entitled "The Secret of a Great Cathedral."**

The second of these less obvious reasons for the popular interest in Gothic architecture is its *endless variety*. In any one cathedral or parish church it is often difficult to find two parts exactly alike,

even of those that serve precisely similar functions. Rarely, if ever, are two west towers identical in design. Capitals are endlessly varied; vault-bosses, shaftings, window traceries present an ever changing manifoldness of detail. The importance of this principle of variation in enhancing the charm and mystery of Gothic buildings has long been recognized; but it has been reserved for an American to penetrate deeper than any one else into the subtleties of the mediæval applications of the principle. The researches of Professor W. H. Goodyear of the Brooklyn Institute Museum, beginning in 1870 at Pisa, and prosecuted at intervals through more than forty years among the Romanesque and Gothic churches of France and Italy,* have revealed an extraordinary system of carefully ordered deviations from mechanical regularity. Curves and bends in apparently straight lines, variations of spacing, dimension and height in piers and arches, and numerous other subtle irregularities, are now found to play an important though hitherto unsuspected part, in producing the impression of life and mystery in many a church and cathedral. The Renaissance appears to have put an end to these practices.

The *symbolism* of the Gothic monuments possesses a strong fascination for many minds, both of readers and writers. Some of the latter have been so carried away with this aspect of the style that they have tried to impute recondite esoteric meanings to every detail and feature, making of Gothic architecture a mystic science instead of the very practical and reasoned art which it mostly was. They doubtless carry it too far in some cases, for it is easy to read into almost any monument mystic and symbolic meanings which never entered the minds of its designers. The extreme symbolical interpretation of Scripture by the early Christian Fathers and by some modern sects offers a parallel in exegesis to the

*In these papers the name Notre Dame without any local or qualifying designation shall be understood as referring to the Cathedral of Paris.

**The Secret of a Great Cathedral. By the Dean of Worcester. London, 1914.

*See Architectural Record, 1896, Vol. VI, Nos. 1 and 2; 1897, Vol. VI, Nos. 3 and 4; Vol. VII, Nos. 1 and 2; 1898, Vol. VII, No. 3; Vol. VIII, No. 2; 1899, Vol. VIII, No. 3, Vol. IX, No. 1; 1904, Vol. XVI, Nos. 2, 5, 6; 1905, Vol. XVII, No. 1.



FIG. 2. CANTERBURY CATHEDRAL, FROM THE SOUTHWEST.



FIG. 3. AMIENS CATHE-
DRAL, FROM THE WEST.

extravagance of some interpretations of Gothic design.* Nevertheless we know that the typical Gothic cathedrals, especially those of the 12th to the 14th centuries in France, were veritable Bibles in stone and glass. In an age when only the "clerics" could read and write, the histories and allegories of Scripture, the lives of the saints, and the great dogmas of the faith could be taught to the multitude only by word of mouth or by pictures and sculptures, and these were multiplied in the churches and cathedrals for the instruction of the worshippers as well as for the adornment of the edifice. The hundreds of grotesques were not mere humorous fancies, but symbols of virtues and vices, according to an organized system or language of symbolic representation, and also, no doubt, in many cases, talismans to charm away those evil influences with which the naïve superstitions of the times people the circumambient air.** Professor Moore has concisely and admirably set forth this aspect of Gothic art on page 28 of his excellent *Development and Character of Gothic Architecture* in these words: "Finally, it should be considered that the Gothic edifice * * * was like a vast open page whereon were written, in imagery which the most illiterate can read, the legends and traditions of the mediæval faith. These legends and traditions * * * appealed to the warmest sympathies and quickened the highest aspirations of the people, and filled them with devotion to the fabric, which they sought to make, at whatever cost of labor and of treasure, a fitting expression of their beliefs and hopes."

Whatever the motives and influences which led to this wealth of representative art, the result is deeply impressive, even to the sophisticated modern mind. To the purely esthetic appeal of the medi-

æval cathedrals it adds an element which ministers powerfully to their solemnity and conduces to the spirit of worship. This impression was felt as keenly in the Middle Ages as the Greeks of old felt the majesty of the Phidian Zeus in the temple of Olympia, or as Paul the Silentiary felt the overwhelming majesty and beauty of Hagia Sophia. The Abbot Suger, who built the Abbey of St. Denis (begun in 1140), has recorded the emotions aroused in him by his completed masterpiece, in an ecstatic passage from which I quote a sentence: "I seem to find myself under some clime foreign to this world, situated neither wholly on this vile earth nor yet wholly in the pure heavens, but lifted up by the grace of God from this lower to that higher realm." The "many-colored splendor as of gems" has vanished from St. Denis and from all other old churches, as from the Grecian ruins, and we cannot guess what the effect of the original mediæval painting and glass would be upon the more sober color-sense of our time. But despite this loss, the Gothic cathedral as a place of worship still has a marvelous power to lure the soul away from earthly cares and fill it with the spirit of devotion. No one can attend a full choral service in an English cathedral, or a grand high mass in Notre Dame or Chartres, without experiencing the stirring of his profoundest emotions, both esthetic and spiritual. Certainly one who can undergo those influences unmoved must be impervious alike to the esthetic and the spiritual appeal. Mr. A. K. Porter, whose two volumes on *Medieval Architecture** are a storehouse of historical research and detailed information, after quoting the passage, from Sugre from which an excerpt was given above, expresses with eloquence this quality in the Gothic monuments: "It is this peculiar quality which for lack of a better term we may call emotional power, that separates Gothic from all other architectures and raises it to the supreme height. The Parthenon is more faultless in taste, more harmonious in ensemble, more perfect in technique; Hagia Sophia is as vast in di-

*I know of a much admired Soldiers' Monument for which the architect invented, after its completion, a most beautiful and appealing symbolism in explanation of its design. In this connection it may be pertinent to quote the familiar traditional jingle explaining the design of Salisbury Cathedral, dating from several centuries after its completion:

"As many days as in one year there be,
So many windows in this church we see;
As many marble pillars here appear
As there are hours throughout the fleeting year;
As many gates as moons one year does view,
Strange tale to tell, yet not more strange than true."

**Consult the article "Bestiaire" in V. le-Duc's "Dictionnaire raisonné.

*"Medieval Architecture, Its Origins and Development," 2 vols.; The Baker and Taylor Company: New York, 1909.

mension and as warm in color. But the Gothic cathedral alone possesses the power to lift the mind entirely from the cares and thoughts of the world, * * * to call forth within the soul a more than mortal joy. * * *[†]

Doubtless many elements contribute to this impressive solemnity. The Gothic cathedrals were evolved, alike in their structural system and in all their parts, purely for the service of religion. The style is primarily an ecclesiastical style. The secular monuments of the Gothic period either, like the feudal castles, belong to and constitute a style apart, or they derive their entire architectural character from the ecclesiastical Gothic, as in the Palais de Justice at Rouen, or the town halls of Belgium, employing pointed arches, ribbed vaults, pinnacles, gargoyles, tracery, tabernacles and gables as nearly as possible like those of contemporaneous churches. The style grew up in the service of the church, under the hands of churchmen; it was a religious art. All the symbolism, the sculpture and the stained glass of these churches was intended to conduce to the spirit of worship. But apart from these factors—which, after all, one must recognize as existent in a high degree also in St. Mark's at Venice, in Hagia Sophia at Constantinople, and in other non-Gothic churches—there is one element peculiar to the Gothic cathedrals and to no other style. This is the *exaggeration of one or sometimes of two dimensions at the expense of the third*. Either length, as in the English cathedrals, or height, as in the French, was made completely dominant at the expense of breadth. It is the seemingly interminable length of Durham, Canterbury, Winchester and Ely, emphasized by their relative narrowness and by the nearly central break of the transept-crossing and lantern, that most immediately impresses the visitor to those shrines. It is the loftiness of Amiens, Beauvais, Cologne, even of Notre Dame and Chartres, that chiefly imparts to them their extraordinary majesty of internal effect. The Sainte Chapelle at Paris is nearly as high as it is long; it would certainly lose three-quar-

ters of its impressiveness if it were but half as high. The majesty of *spaciousness*, which one feels in vast interiors like the Pantheon and Hagia Sophia, was wholly foreign to the tastes and purposes of the Gothic builders. The long and relatively narrow nave leads the view and directs the attention to the altar and the mysteries of the solemn ritual in the sanctuary. The nave of Cologne cathedral is but little more than half as wide as that of St. Peter's at Rome, although of almost exactly the same height. But in Cologne, the gaze can wander only heavenward from the high altar, while in the Pontifical basilica the entire architecture seems designed to lead the eye and mind up and into the magnificent dome, under which the huge baldachino cuts off all view of the altar, and the gaze when not lifted to the dome, wanders from side to side in the vast expanse of the rotunda and nave. The length and loftiness of the Gothic cathedrals contribute mightily to the solemn impressiveness of their interiors.

For those who are not mere tourists, and whose interest in Gothic architecture is more than a casual and superficial fancy, there is a fascination in seeking out, studying and verifying the *constructive logic* which dominated the development of the style, especially in France. Ever since Viollet-le-Duc first expounded in his *Dictionnaire raisonné* this fundamental logic, and made clear the extent to which the evolution of French Gothic forms and details had been controlled by cool reasoning applied to structural requirements, this quality of logic in design has engaged the studious attention of critics, especially of Americans. To some of these, indeed, French Gothic architecture seems to present itself as less an art than a science; the considerations of pure form, of fancy and invention, of symbolism, ritual, and even *esthetic* logic as distinguished from *structural* logic, receive scant consideration at their hands, and their criticism is thus restricted to a narrow field. Such a conception fails to present an adequately broad and complete picture of Gothic architecture, and sometimes leads to forced and erroneous conclusions.

[†]Op. cit., Vol. II, 253.



FIG. 4. A "BIBLE IN STONE." CENTRAL PORTAL, NOTRE DAME, PARIS.

III.

Having thus briefly outlined the factors which in the Gothic architecture itself contribute most powerfully to the popularity of the style, let me now direct attention to the literature, descriptive and critical, which first aroused, and has since ministered to, this popular interest. It seems at first sight incredible that this interest had its beginnings only a century ago, in a persistent polemic waged in its behalf by a few enthusiasts; such, however, is the case. In the eighteenth century Gothic architecture was quite generally decried as barbarous and inartistic, even by cultivated people. The great intellectual movement of the Renaissance, ushering in new ways of thinking and new ideals, had broken down the mediæval domination of the church over private thought and life, and had made fashionable the cult of antique art. The world of art and culture was too narrow in its tastes and habits to feel enthusiasm at one and the same time for the extinct Gothic style, with all its mediæval and ecclesiastical associations, and for the neo-classic art which was multiplying its masterpieces of architecture, painting and sculpture throughout Europe in the sixteenth and seventeenth centuries. In Italy the Gothic style was called, disparagingly, the *maniera Tedesca*—the German manner. Even Michel Angelo, who was great enough to appreciate the beauty of certain Gothic buildings, taunted Antonio da San Gallo (whom he hated), with designing his model for St. Peter's with "too many small and petty parts and wreaths of columns, after the 'German' manner." In the seventeenth and eighteenth centuries it became similarly the fashion in England to decry the Gothic style as barbarous, antiquated, without rules or "orders." The disparaging name of "Gothic" has come down to us from that undiscerning and uncritical age. It was not until the nascent spirit of archeological investigation had, near the end of the eighteenth century, begun to turn men's attention to the historic monuments of their own land in England, France and Germany, that here and there a spark of enthusiasm was kindled for the monuments of mediæval art. Professor Moore,

in his *Development of Gothic Architecture*, has briefly and effectively sketched the beginnings of this new interest;* an interest, it must be confessed, intellectual and literary rather than artistic. In the larger architectural libraries one may consult copies of the books he enumerates: Carter's *The Ancient Architecture of England*, and *Collection of Ancient Buildings in England*, published at the close of the eighteenth century; Britton's *Architectural Antiquities of Great Britain*, and *Cathedral Antiquities of Great Britain*, published early in the nineteenth; the various works of the elder Pugin, and others not mentioned by Moore. In France the monumental series of folios of Baron Taylor and M. Nodier, the *Voyage Pittoresque de la France*, begun as early as 1810 and continued for fifty years, prepared the way for the French awakening in behalf of the despised architecture of the Middle Ages. But, as Professor Moore points out, these early works were for the most part singularly uncritical, directing attention to details rather than fundamental principles. It was Rickman who first, in his *Attempt to Discriminate the Styles of Architecture in England* (1817), laid the foundations for a critical study of the historic development of the successive phases of Gothic architecture in England, by his division of its history into the Norman, Early English, Decorated and Perpendicular periods and styles. But like all the other early writers he treats of forms and details, not of organic principles. It was not until 1835 that the earliest recognition of the structural evolution of the style appeared in Willis' *Remarks on the Architecture of the Middle Ages*; and it was he who first, among writers in English at least, in his historic *Essay on Vaulting* (1842), expounded the structural development of Gothic vaulting and its fundamental importance in any analysis of the style. These and other works of a more popular character served to generate a fashionable interest in Gothic architecture among the educated and literary classes. After the middle of the century such works as Brandon's *Analysis of Gothic Architecture*, Sharpe's *Paral-*

*Op. cit., pp. 3-7.



FIG. 5. NAVE OF NOTRE DAME, PARIS.
EMPHASIS OF VERTICAL DIMENSION.



FIG. 6. BEVERLEY MINSTER, FROM THE SOUTHWEST. EMPHASIS OF LENGTH.

els and *The Seven Styles*, Parker's *Glossary*, Fergusson's *Handbook of Architecture* and his *History of Architecture in All Countries*, and Ruskin's *Seven Lamps of Architecture* and *Stones of Venice*, besides other less important works, converted the fashion into a genuine popular interest, based on a better understanding of principles, though the emphasis was still placed too much on forms and details.

IV.

During the period from (say) 1820 to 1850 the growing interest in Gothic art, still confined to a minority and tinged with a large element of affectation and false sentiment, had to contend with the more fashionable and widely favored Greek Revival. In a previous article* I have commented on the origin, nature and extent of this revival and its influence upon the criticism of Roman architecture,

and pointed out the concurrent progress and character of the Gothic Revival. Both movements were vitiated by an almost complete misunderstanding of the real nature of the styles they sought to promote, and indeed of architecture itself. The focusing of attention upon external forms and details, the failure to penetrate to the inner spirit and *rationale* of either style, and the disastrous notion that the rescue of architecture from its confessed inanition was possible only by copying as closely as possible the forms of some one dead and bygone style, all united to divide the would-be reformers into two hostile camps. The partisans of neither side were able to discover or admit any merit in the contentions of the other. The Hellenists looked upon the Gothic movement as a narrow, fanatical and artistically mistaken effort to reproduce the monuments of a benighted mediævalism, from which the world had been delivered. Greek art, on the other

*Architectural Record for May, 1915; Vol. XXXVII, No. 5.



FIG. 7. HEREFORD CATHEDRAL:
GALILEE AND TRANSEPT.

hand, was the fountain head of all that is pure, true and beautiful in plastic design. The Gothicists regarded Greek architecture as pagan and foreign, utterly inflexible and inadaptable to modern needs, the work of a pre-Christian, immoral and long dead civilization; while Gothic architecture was Christian, British and capable of endless variation and adaptation. In this "battle of the styles" stalwart blows were dealt by the younger Pugin (Augustus N. Welby), who devoted all the strength of a fanatical conviction and the eloquence of a satirical pen to the defense and upbuilding of the Gothic cause, in his *Contrasts* (1836), *True Principles of Christian Architecture* (1841), and other works. His efforts were succeeded and powerfully seconded by the transcendental sermonizings of John Ruskin, whose *Seven Lamps of Architecture* appeared in 1849 and the *Stones of Venice* two years later. His architectural criticisms exhibit an extraordinary blend of poetic imagination, religious fanaticism, moral fervor and mistaken theory. No critic ever expressed his opinions with more dogmatic positiveness or greater literary eloquence, and none ever obtained so wide a hearing and extensive a following on so slender a basis of knowledge of his subject. The fundamental vice of Ruskin's criticism is not his intolerance, though that is of a kind that rouses one's instinctive opposition; nor his particular judgments upon buildings, which are sometimes keen and just; nor yet his inconsistencies, though these are sometimes glaring. The errors which run through and vitiate his whole critical structure, so far as it applies to architecture, are chiefly two. The first is his inability to distinguish between the fields of esthetics and of ethics. Ruskin was by nature a moral and social reformer, and all his judgments of architecture are colored by his views of the morals of the age which produced the works he judges. A good deal of a mystic himself, he loved mediæval art because the Middle Ages appeared to him as a deeply religious period, whose mysticism was beautiful in itself and beautified everything it produced. The Renaissance, on the other hand, was the em-

bodiment of the sceptical spirit, the destroyer of mysticism and of true religion, and of all that the mystical, religious Middle Ages stood for and produced. Therefore the Renaissance and all its works were hateful to him, and the vials of his scorn are emptied upon even its loveliest works, which have no beauty in Ruskin's eyes, because tainted with the vanity and corruption of an irreligious age. What he thought of Greek and Roman architecture I have briefly alluded to in a previous article.*

The second fundamental error in Ruskin's criticism is his ignorance of architecture. Few men have written on the subject who have so completely misapprehended what architecture really is, of what forces and influences it is the product, how a work of architecture is really brought into being. For him it is all a question of details. Read in *Stones of Venice* the long disquisitions on Italo-Byzantine capitals; on grotesques; on the shapes of arches; his amusing theory of the cusped arch; in *The Seven Lamps* his theory of ornament design; or almost any single chapter in these two works; the criticism is all about the details. Planning and construction hardly exist in his mind as elements of architecture. Yet his works have been read by more thousands than any other books on architecture in our language. Their influence on the popular mind has been both good and bad. They undoubtedly served to rouse Victorian England from her apathetic condition of smug self-satisfaction in the mid-century period—largely through their moral appeal, to which the English public was more sensitive at that time than to purely esthetic considerations. That was a real service. On the other hand, by their wholly false presentation of architecture itself, they greatly retarded the development of any true appreciation of architectural values. Moreover—and this is a singular fact—Ruskin's studies of Gothic architecture were almost wholly based on Italian examples, not on the parent French style nor on the derived but independently developed English Gothic. Now the Italian "Gothic" merits that

*In the Architectural Record for May, 1915, p. 443.



FIG. 8. "THE MONSTERS OF THE TOWER"; NOTRE DAME, PARIS.

name solely by its decorative details. Neither in its constructive system nor in its planning nor in its architectonic composition has it any affinity with the "true" Gothic of Western Europe. Its Gothic details are a borrowed fashion, applied decoratively to buildings whose primary conception is really Roman or at most Basilican in its essence. Ruskin's fervid criticisms of architecture therefore, so far as they produced any effect on British public taste, served to set up wholly mistaken standards by which to judge the fine Gothic architecture of Great Britain itself, or of France.

A much nearer approach to correct and rational standards of criticism was that of Fergusson's *Handbook of Architecture*, published in two volumes in 1855, a work which he later expanded into his well-known *History of Architecture in All Countries* (1871), also in two volumes, covering the history of styles down to the Renaissance.* This was the first

scholarly history of architecture in English, and for twenty-five years it was the accepted authority in our language, and deserved its high reputation. In its discussion of the Gothic styles it recognized the structural basis of their development, and showed little of that narrow, uncritical insistence, so common in English books, on an independent English origin for the style. This curious nationalistic partisanship it is hard for Americans to understand. It still persists in some English books of recent date, but is passing away; and the best of recent English histories—Simpson's *A History of Architectural Development* (1907-10)—betrays none of it. It offers quite the fairest and best of English discussions of the origin, development and characteristics of the Gothic styles in France, England and Germany. The writings of Francis Bond, with their superb illustrations and their wealth of detailed information, I shall refer to in another article.

Meanwhile in France there had appeared a work by Eugène Emmanuel Viol-

*These two volumes were supplemented by a "History of Modern Architecture" (1873) and a volume on "Indian and Eastern Architecture" (1876).



FIG. 10. A PAGE FROM VIOLLET-LE-DUC'S DICTIONNAIRE, ARTICLE "CHAPELLE."

Viollet-le-Duc which, more than any other book ever written, seemed to make clear the real significance of Gothic architecture. This was his epoch-making *Dictionnaire raisonné de l'architecture française*, in nine volumes and an index, first published in 1854-68. It is a "reasoned" dictionary, accompanying every definition with a discussion of the causes, origins, development and reasons of and for the thing defined. The article *Architecture* occupies 337 pages; *Cathédrale*, 113 pages; *Construction*,* 279, and others in proportion. They are essays, based on a combination of erudite study of written docu-

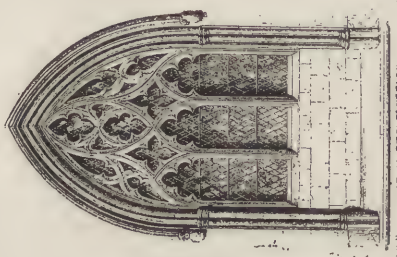
*This important article was translated into English in 1895 by George Martin Huss, and published as a separate volume by Macmillan under the title "Rational Construction."

ments, and practical examination of the monuments. Its author was one of the draftsmen employed to illustrate the Taylor-Nodier *Voyage Pittoresque* (see ante, p. 346); a consummate artist, he was also a scholar and a practical architect. He above all other emphasized the structural and esthetic logic which dominated the development of the French Gothic style; he brushed away popular misconceptions and corrected the mistakes of learned predecessors, clearing up the detailed history of many of the great cathedrals and churches of France. He made mistakes, of course; a long line of illustrious contemporaries and successors like Ruprich-Roberts, Enlart, Lefèvre-Pontalis and others have disclosed and cor-

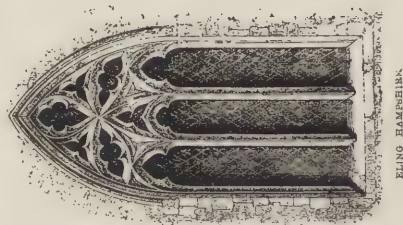


FIG. 10A. A PAGE FROM THE ARTICLE ON "CONSTRUCTION."

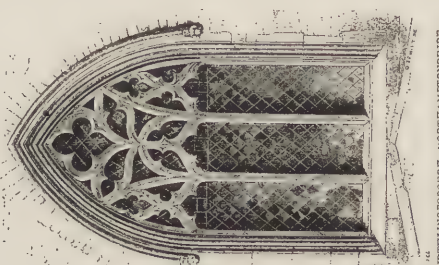
DECORATED ENGLISH WINDOWS



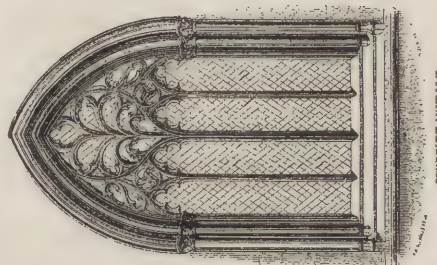
ST. MARY'S, BEVERLEY.



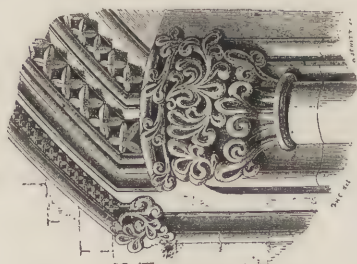
ELING HAMME.



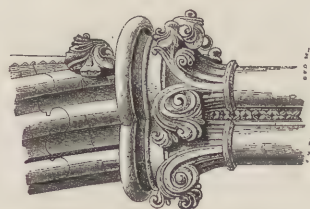
INTLINGBOROUGH, NORTHAMPTONSHIRE



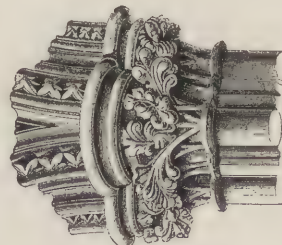
BEVERLEY MINSTER



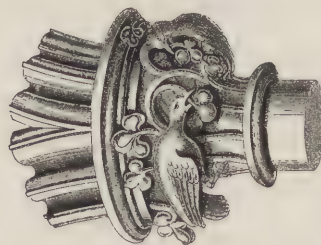
NORTH TRANSEPT, ROMSEY ABBEY



NORTH TRANSEPT, LINCOLN CATHEDRAL



NORTH TRANSEPT, YORK CATHEDRAL



TOMB OF ABB. WALTER GRAY, YORK

FIG. 9. TWO PAGES
FROM RICKMAN.

rected these; but save in some details, his work remains a lasting monument of patient, keen-minded and thorough historical criticism.

American critical discussion of Gothic architecture began in 1889 with the publication of Professor Charles Moore's *Development and Character of Gothic Architecture*. This work, of which several editions have since then appeared, has won for itself an honorable place in this field of criticism, in spite of certain defects which will be discussed later. It emphasizes to the very limit the structural logic of the French Gothic development, which its author insists on calling the only "true" Gothic. Seven years later I published my *Textbook of the History of Architecture*, in which I tried to develop a broader conception of the Gothic styles, without traversing otherwise the very acute, suggestive and scholarly discussions of my learned *confrère* of Harvard. In the same year (1896) appeared *European Architecture*, by the late Russell Sturgis, in which the principles and development of West-European Gothic architecture are very lucidly set forth, in a more popular style and with a more catholic sympathy for the non-French styles, than in Moore's notable book. Since then Mr Sturgis' *Dictionary of Architecture* and his posthumous *History of Architecture* have appeared; and the works of Good-

year and of A. K. Porter, earlier alluded to, and the latter's investigations into the Lombard origin of ribbed vaulting, have added to the reputation of American contributions in this literary field. The writings of Ralph Adams Cram and Henry Adams' *Mont-Saint-Michel and Chartres* are in a different vein, less scientific, more imaginative than those previously mentioned, but full of suggestion and well worth reading.

As I said earlier in this long article, I could mention but a few names and titles in the vast literature of the subject. Doubtless many of my readers will wonder at the omission of well-known works and writers; they would have chosen differently! Very likely their choice would have been better than mine; but they have not written this paper, and will have to supply its deficiencies in their own way. I have tried merely to sketch in a few broad outlines the genesis and growth of this literature in English (referring to the French only when absolutely necessary), in order to clear the path for a later paper or papers in which I shall seek to make clear some of the more prevalent fallacies and misconceptions to which some of these works have given an unmerited currency. The lure of the Gothic architecture is undeniable, and it is highly to be desired that those who love and admire its works should not be misled by errors which seem to have the support of scholarly authority.



ST. LOUIS HOTEL, NEW ORLEANS. BUILT ABOUT 1840.

The Dome of The Old St. Louis Hotel — New Orleans —

By N. C. Curtis

DURING the period from 1830 to 1845 New Orleans reached the meridian of ante-bellum prosperity. These years are spoken of as "the flush times" in Louisiana, when every Fall the wealthy planters and merchants journeyed with their families to the city to transact business and partake of the pleasures of the gay winter season. Soon the simple French pensions and inns were filled to overflowing, and in order to take care of the ever-increasing transient population it became necessary to provide larger and grander accommodations. So began the famous old St. Charles and St. Louis hotels. In those days there were no commercial exchanges and consequently the rotundas of these hotels were the customary places where merchants met to barter in such staple commodities as slaves, cotton and sugar. The hotels were the centers of life and fashion and the events associated with the subsequent history of these gorgeous caravansaries would fill a large volume—its pages

crowded with romance and political intrigue.

The present St. Louis hotel was built about 1840 at a cost of over a million dollars. After the ravages of the hurricane of last September, the building, reduced through many years of neglect to a mere rotting shell, was sold to a wrecking company and its demolition immediately commenced. *Sic transit gloria mundi.*

Architecturally the façade of the old hotel was simple, dignified and well-mannered enough, but it was not of exceptional importance. On the other hand, when we consider the interior there were two features of plan that are remarkably interesting, the grand spiral staircase and the circular rotunda. It is the constructive ingenuity and genius shown by the architect in building the dome over the rotunda that especially arouses our admiration. There is nothing like it in American architecture, and, in fact, hardly anywhere else in the world.

The havoc wrought by the great storm brought this method of construction to light, for how and of what material the dome was built had long since been forgotten.

The dome was not designed with a view to exterior effect and could not be seen at all from nearby streets, but delightful glimpses could be obtained of it from the courtyards within the hotel and from the upper windows of neighboring buildings and these were enhanced by the exquisite shades of green and pale-blue which time and weather had imprinted on its heavy copper plating. This plating was entirely stripped off by the gale, exposing the porous shell to the torrential rains that prevailed during the week following the storm. Large masses of the interior plaster work fell to the floor and the celebrated mural decorations attributed to Canova's nephew were soon obliterated. Thus came about the disclosure of the singularly interesting manner of construction; interesting not only on account of the bold spirit in which the architect conceived his undertaking and the success with which he carried it out, but also because this method is exceedingly rare in the annals of dome building. In fact the architect was constrained to adopt constructive devices which have not been employed for 1,400 years.

The dome is built wholly of earthen pots or cylinders, recalling at once some of the curiously constructed Early Christian churches in Ravenna—notably the Orthodox Baptistery and the famous Church of S. Vitale. The method of laying the pots adopted by the architect of the St. Louis dome is, however, quite different from the examples cited.

In the case of the Baptistery, it will be remembered that the pots or tubes, which are about eight inches long by three in diameter, are joined in a continuous spiral from base to crown. There are two layers of tubes which show as circles in vertical section, giving a thickness of shell of not more than eight inches, with a diameter of thirty-five feet.

In S. Vitale the earthen pots take the form of hollow terra-cotta urns and jars,

formed so that the bottom of one jar fits into the mouth of another. For about one-third of the height the urns are placed upright, and above these a double layer of jars occur, laid horizontally in a thick bed of cement—as in the case of the Baptistery. The thickness of the shell is about twelve inches and the central space fifty feet in diameter.

The St. Louis Hotel rotunda considerably exceeds in dimensions both its historic prototypes. It has a diameter of sixty-six feet, a height from spring to crown of thirty-eight feet and a total clear height above the floor of eighty-eight feet. The thickness of the shell is exactly twelve inches.

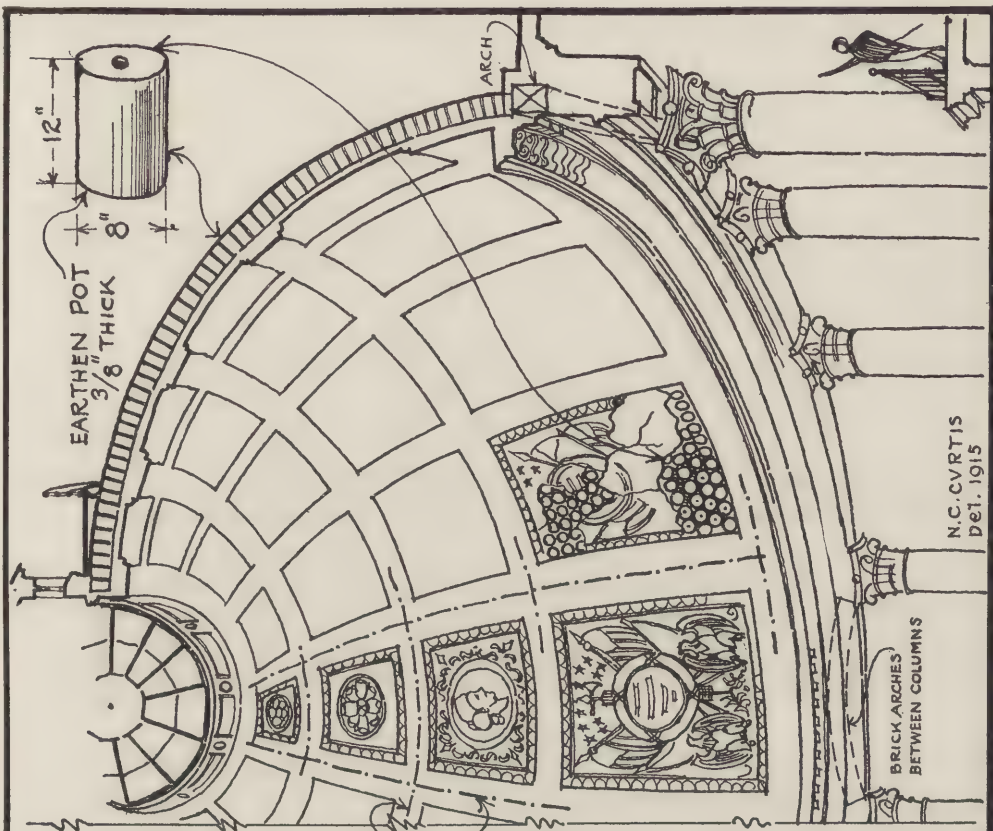
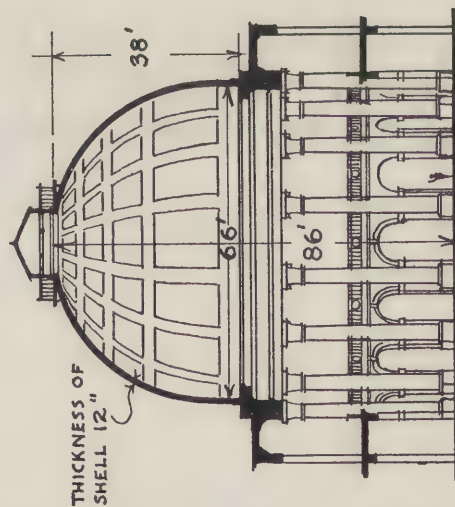
In deciding upon a form of construction for the dome, the architect, DePouilly, had to consider first of all that he was about to build on a soil little better than a quagmire. His dome had therefore to be of extraordinary lightness. The fact that after a lapse of three-quarters of a century no cracks or inequalities of settlement have appeared in his fabric is a tribute to his exceptional skill and judgment.

The dome is composed of one layer of hollow pots, varying in shape from cylinders in the lower courses to truncated cones, graduated to correspond with the diminishing diameters of the ascending circles. The ends of the pots are closed or nearly so and they are eight and ten inches in diameter, twelve inches long, with only three-eighths inch thickness of shell. They are laid with their axes along the radius, so that their round ends are exposed and not their sides as in the case of the Ravenna domes. This is the main point of difference.

A little figuring on the content of the dome shell brings us to the conclusion that the proportion of solid material is only 16 per cent. of the spherical mass. Computing a little further we find that the total weight of the dome approximates no more than 100 tons. Since there are sixteen equally-spaced brick masonry columns supporting the dome, each three feet six inches in diameter and thirty-four feet long, a summation of weights brings a load of about twenty-five

♦ SECTION THRO' DOME
 OLD ST. LOUIS HOTEL
 NEW ORLEANS • 1840 •
 SHOWING HOLLOW POT-
 CONSTRUCTION.
J.N. De Pouilly. Architect.

FRAMEWORK OF
 $2\frac{1}{2}$ " IRON BARS



tons to bear on each footing, and if a supporting power of one-half ton per square foot is allowed the soil, it will be seen that, provided DePouilly figured on a timber grillage only ten feet square, he would be well within the limits of safety. The exact nature of the footings has not yet been ascertained, but they are probably grillage footings, as pile foundations were not used in New Orleans at that date. It is interesting to note that had the dome been built of solid brick masonry it would have weighed in the neighborhood of 800 tons and that dangerous settlement could hardly have been averted.

The portion of the dome between the columns is carried by segmental brick-rowlock arches sprung from column to column and spanning a distance of ten feet. Sixteen wrought iron ribs, linked

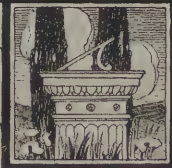
together at intervals, are built into the shell; possibly as reinforcement, but more probably they were erected to carry some sort of wooden centering for supporting the successive layers of tiles.

DePouilly received his training in Paris some time during the first quarter of the last century, and all his work is affected by the grandiose style of the Roman Revival. The old Citizens' Bank on Toulouse Street, which stood until late years, was a conspicuous example of his taste.

His dome should be recorded in history as an outstanding achievement in the annals of American architecture. It proclaims him a genius of no mean order. For real courage and constructive skill in dome building, his feat, considering all circumstances, has not often been surpassed.



PORTFOLIO OF CURRENT ARCHITECTURE



ROSE



NEW HAVEN (CONN.) COUNTY COURT
HOUSE. ALLEN & WILLIAMS, ARCHITECTS.



NEW HAVEN (CONN.) COUNTY COURT
HOUSE. ALLEN & WILLIAMS, ARCHITECTS.



SELF-DENIAL—NEW HAVEN (CONN.) COUNTY COURT HOUSE.
J. Massey Rhind, Sculptor.



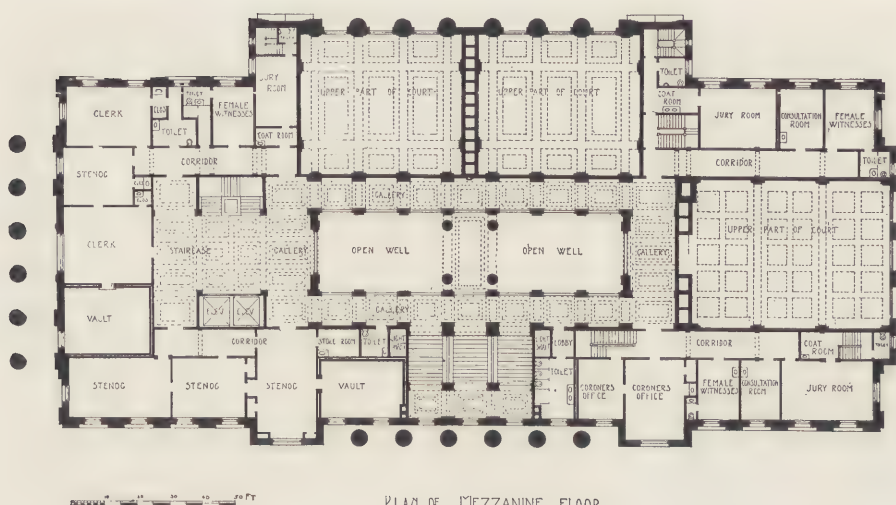
TRUTH—NEW HAVEN (CONN.) COUNTY COURT HOUSE.
J. Massey Rhind, Sculptor.



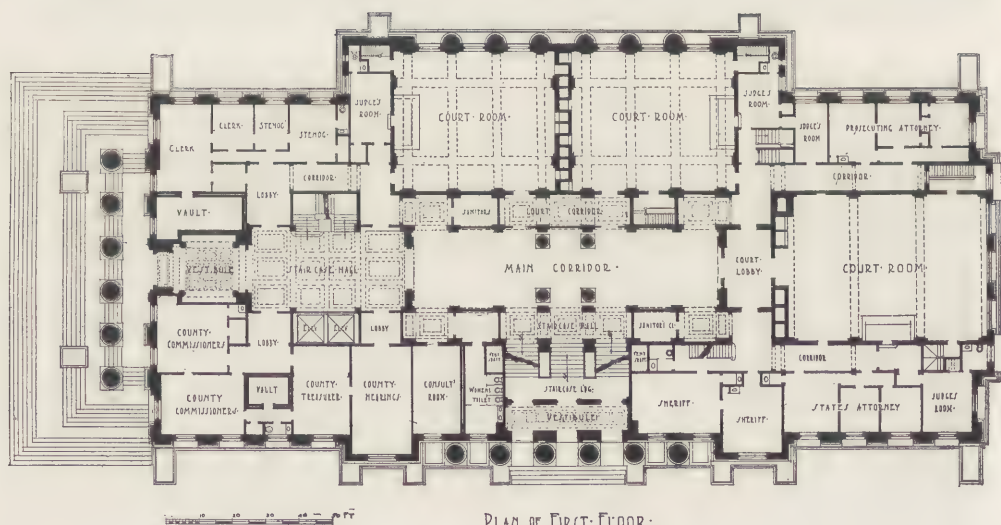
THE ADVOCATE—NEW HAVEN (CONN.) COUNTY COURT HOUSE.
J. Massey Rhind, Sculptor.



THE LAWMAKER—NEW HAVEN (CONN.) COUNTY COURT HOUSE.
J. Massey Rhind, Sculptor.

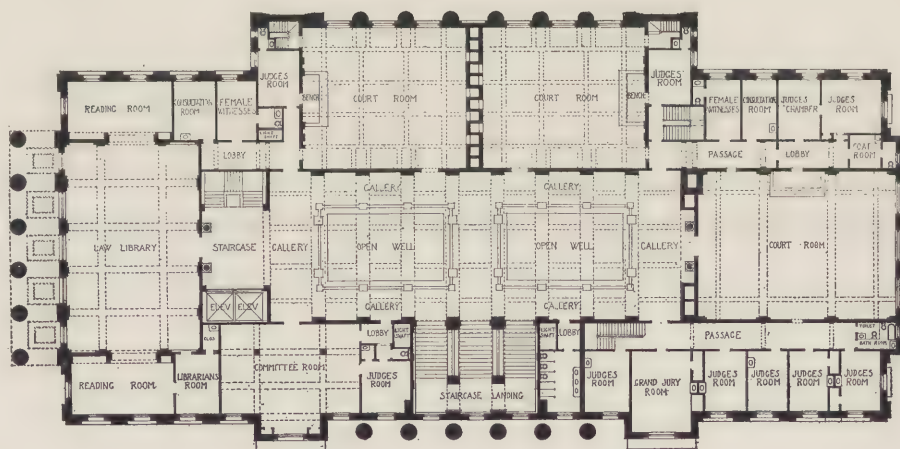


PLAN OF MEZZANINE FLOOR



PLAN OF FIRST FLOOR

NEW HAVEN (CONN.) COUNTY COURT HOUSE. ALLEN & WILLIAMS, ARCHITECTS.



UPPER CORRIDOR AND PLAN OF SECOND FLOOR—NEW HAVEN (CONN.) COUNTY COURT HOUSE. ALLEN & WILLIAMS, ARCHITECTS.



CORRIDOR—NEW HAVEN (CONN.) COUNTY COURT
HOUSE. ALLEN & WILLIAMS, ARCHITECTS.



SUPREME COURT ROOM—NEW HAVEN (CONN.) COUNTY COURT HOUSE.
Allen & Williams, Architects.



SUPERIOR COURT ROOM—NEW HAVEN (CONN.) COUNTY COURT HOUSE.
Allen & Williams, Architects.



STUDIO BUILDING, BOSTON, MASS.
LORING & LELAND, ARCHITECTS.



POST OFFICE AT WATERVILLE, MAINE.



POST OFFICE AT MARIETTA, GEORGIA.



POST OFFICE AT BROOKINGS, SOUTH DAKOTA.



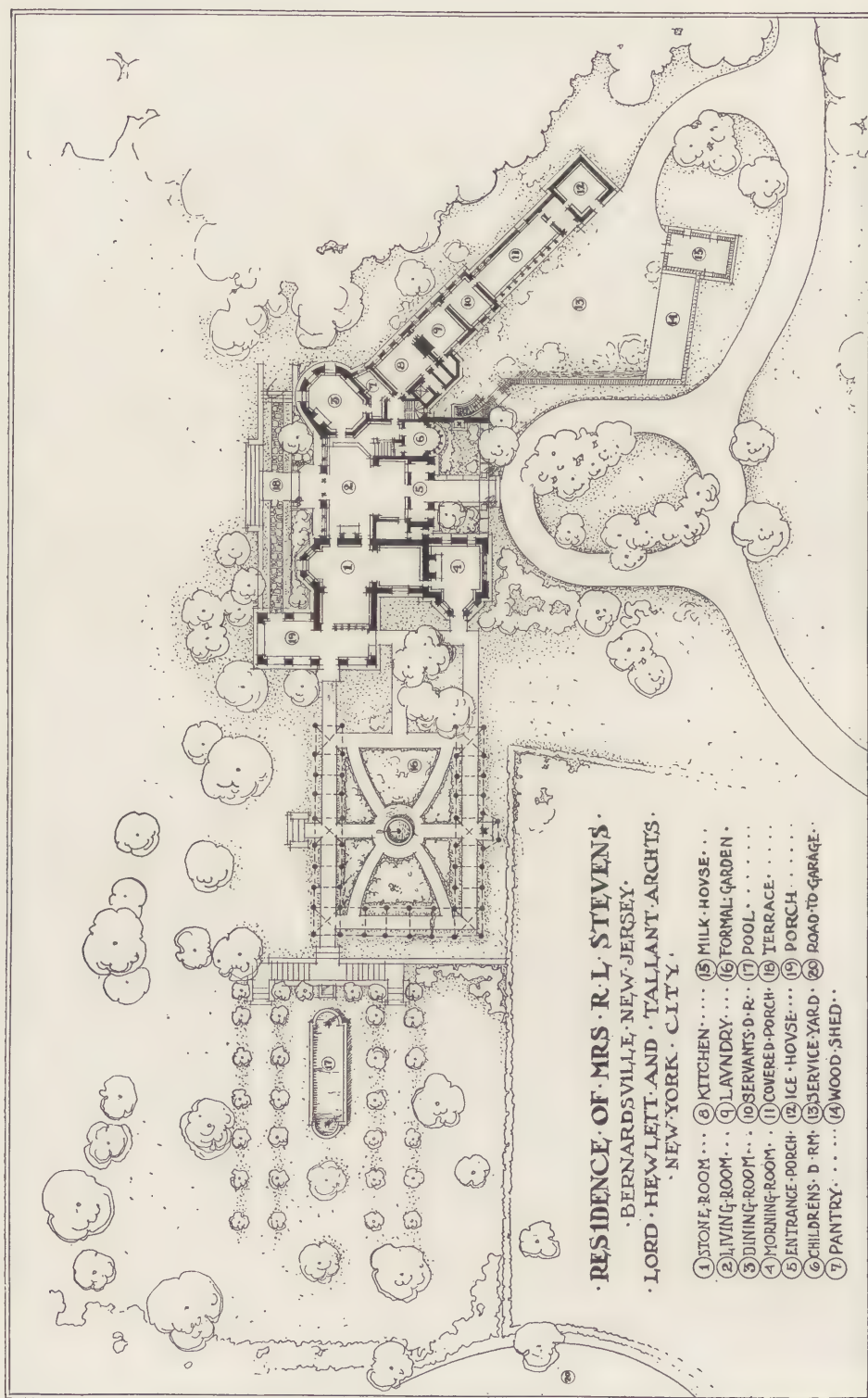
POST OFFICE AT SAN JUAN, PORTO RICO.



POST OFFICE AT MINNEAPOLIS, MINN.



POST OFFICE AT PARIS, TEXAS.





FRONT VIEW—RESIDENCE OF MRS. R. L. STEVENS, BER-
NARDSVILLE, N. J. LORD, HEWLETT & TALANT, ARCHITECTS.
(For description see page 393)



FRONT AND SIDE—RESIDENCE OF MRS. R. L. STEVENS, BERNARDSVILLE, N. J.—LORD, HEWLETT & TALLANT, ARCHITECTS.



SIDE VIEW-RESIDENCE OF MRS. R. L. STEVENS, BER-
NARDSVILLE, N. J.-LORD, HEWLETT & TALLANT, ARCHITECTS.



REAR VIEW—RESIDENCE OF MRS. R. L. STEVENS, BER-
NARDSVILLE, N. J.—LORD, HEWLETT & TALLANT, ARCHITECTS.



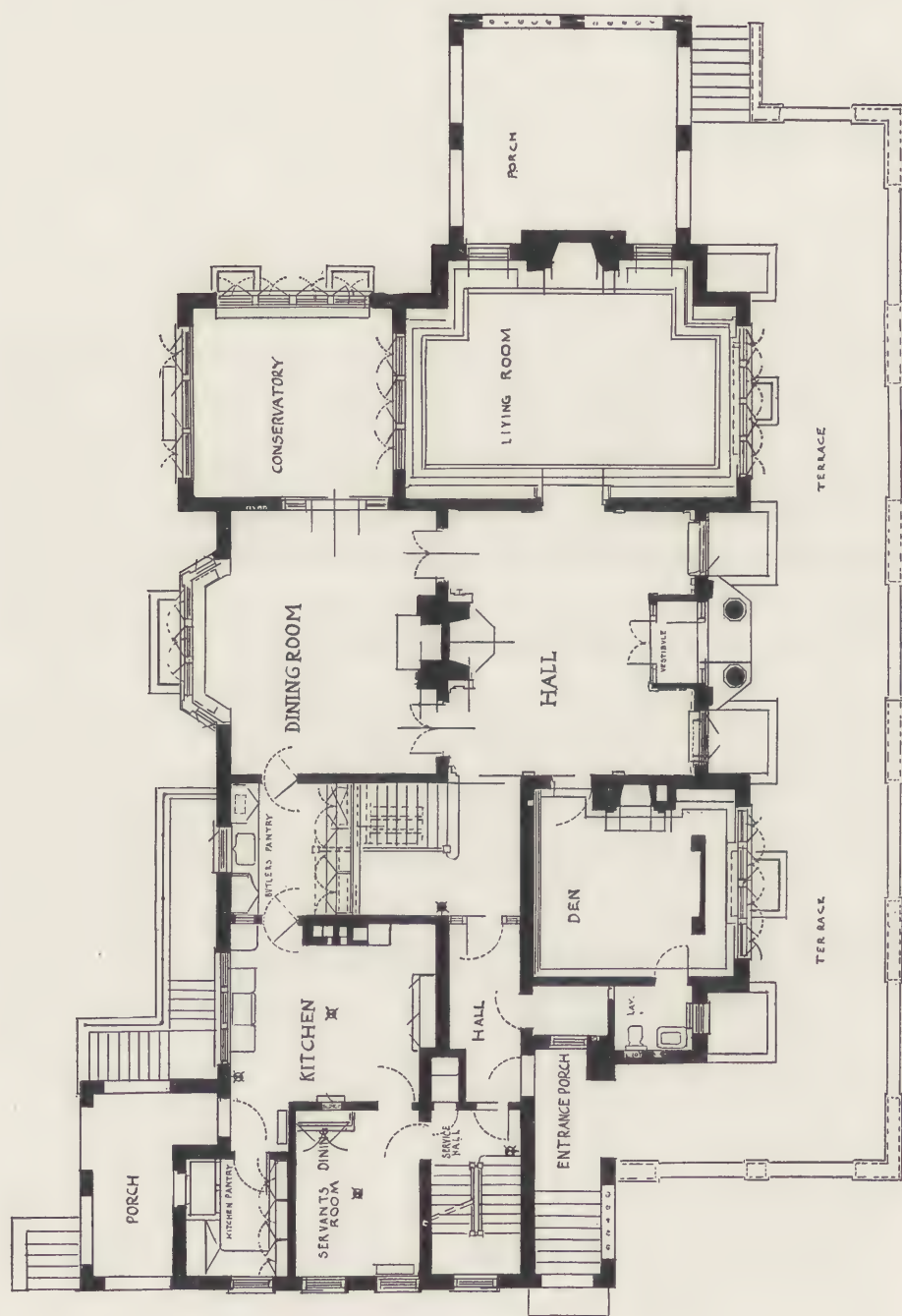
RESIDENCE OF J. C. REA, ESQ., PITTSBURGH,
PA. MacCLURE & SPAHR, ARCHITECTS.



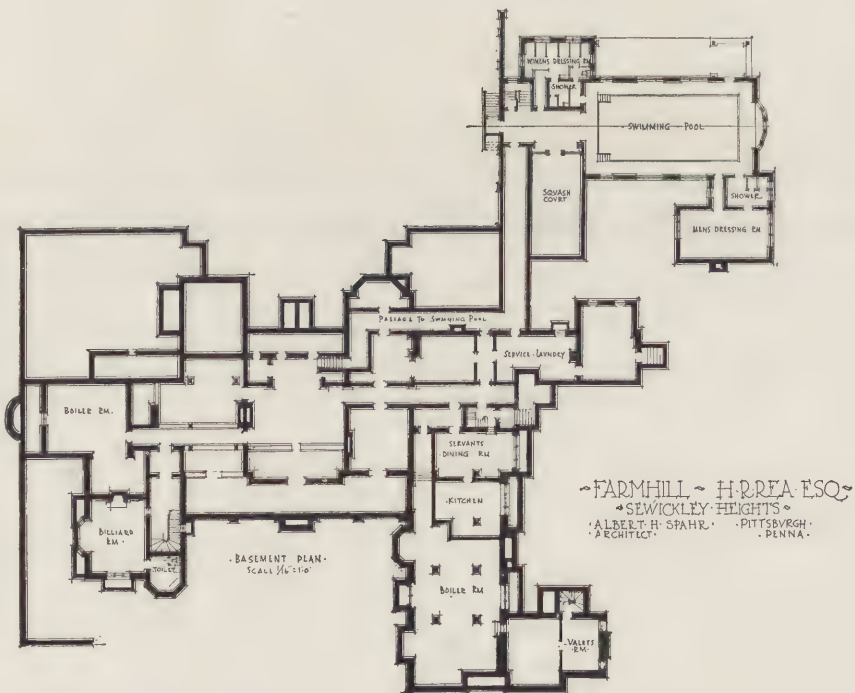
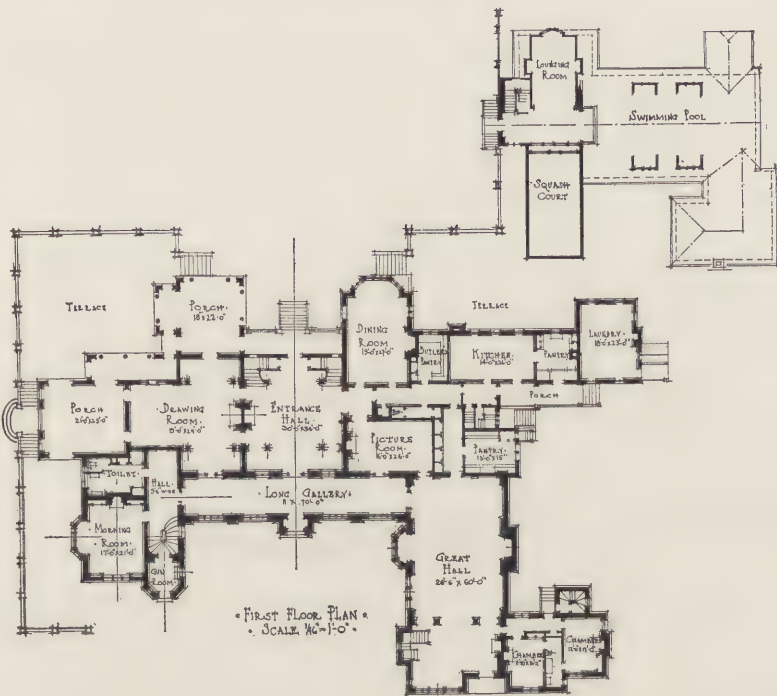
HALL—RESIDENCE OF J. C. REA, ESQ., PITTS-
BURGH, PA. MacCLURE & SPAHR, ARCHITECTS.

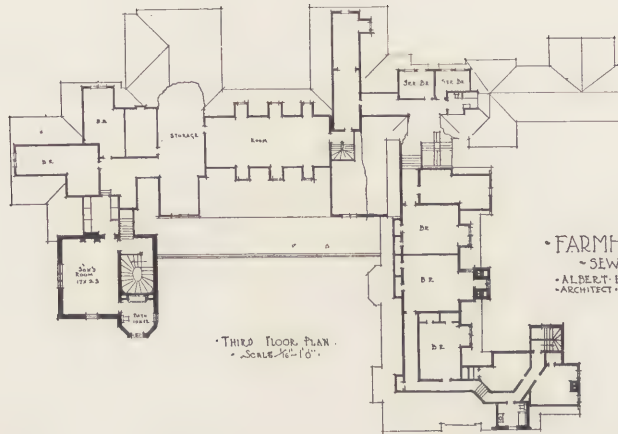


LIVING ROOM—RESIDENCE OF J. C. REA, ESQ., PITTS-
BURGH, PA. MacCLURE & SPAHR, ARCHITECTS.

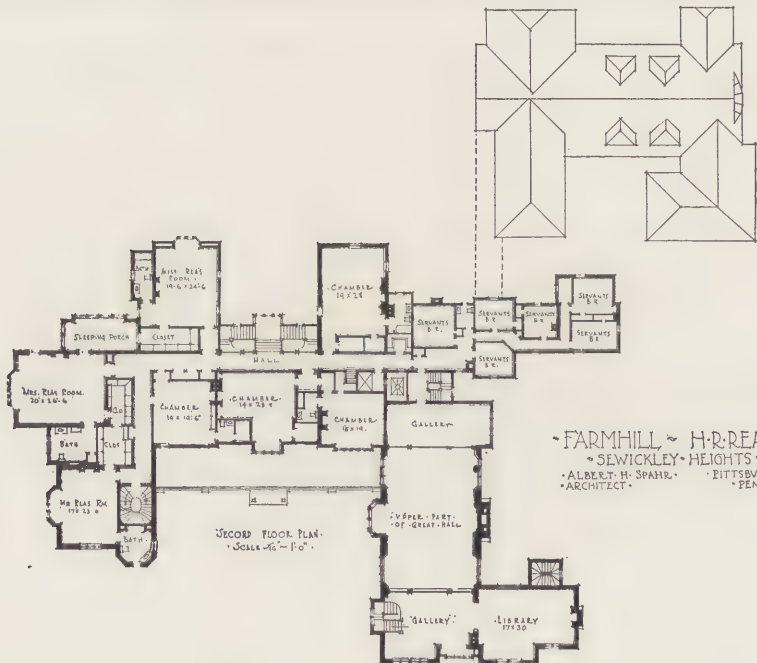


FIRST FLOOR PLAN—RESIDENCE OF J. C. REA, ESQ.,
PITTSBURGH, PA. MacCLURE & SPAHR, ARCHITECTS.





FARMHILL - H. R. REA, ESQ.
SEWICKLEY HEIGHTS -
ALBERT H. SPAHR, ARCHITECT.
PITTSBURGH, PENNA.



FARMHILL - H. R. REA, ESQ.
SEWICKLEY HEIGHTS -
ALBERT H. SPAHR, ARCHITECT.
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BOOKS ON COLONIAL ARCHITECTURE

By RICHARD FRANZ BACH

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Part III.—Dwellings (Continued)

THE Dutch phase of American Colonial architecture which is illustrated exclusively in dwellings, has been adequately treated by Aymar Embury II in *The Dutch Colonial House, Its Origin, Design, Modern Plan and Construction* (Large octavo; pp. 6+iv+108, ill. New York: McBride, Nast & Company, 1913. \$2 net), published as one of an extensive series of useful volumes on domestic architecture past and present in this country entitled *The Country House Library*. In discussing his style the author finds it characteristic of Dutch Colonial architecture that its spread and effect seem to have ceased not long after New Amsterdam became British, and that there is no direct chain of buildings from old Dutch to present times carrying through a definite tradition. It stands, therefore, in direct contrast to the continuity of life which has favored the New England Colonial manner, and which has caused that style to live almost uninterruptedly up to the present as well understood and as vigorously active as though the interloping period of decadence, called the Victorian age, had never subjected Amer-

ican art to its baneful influence. It is interesting also to note the radical differences existing between the typical Dutch Colonial dwelling and the representative houses of both the New England and the Virginian varieties. Due, no doubt, to differences in home land origins, in religious points of view and not a little to the enormous intervening distances not yet reduced by rails or wires, the three fashions of building were able to develop what may be termed distinct styles, varying decidedly from one another, each representing a personal attitude toward life and an individual angle of attack upon the disheartening problem of forcing sustenance and domestic happiness out of alien soil and circumstances.

Mr. Embury finds that the attempt to establish the genesis of the Dutch Colonial style meets its first reward in a consideration of the materials at hand in the districts in which it flourished. "Northeastern New Jersey was at some remote age the termination of the glacial drift, and the fertile fields which offered such an alluring bait to the Dutch settler were covered with red sandstone,

not native to the country, but brought there long ago by the glaciers. These stones had to be removed from the fields before these (the latter) could conveniently be worked, and since they had to be moved, in the natural sequence of things it was as convenient to pile them on top of each other to form walls for the fields and walls for the house as to dispose of them in any other way. The earliest Dutch farm houses in New Jersey are, then, of stone. In Long Island, on the other hand, building stone was about as common as diamonds, and the houses were built of wood and then covered either with shingles or with clapboards, although in a few cases a frame wall was filled in with brick and plastered over the whole surface—the wood as well as the masonry. The New Jersey type of construction very probably led to the development of the most familiar characteristic of Dutch work, the long overhanging roof. In building their walls the early settlers did not have proper materials with which to build; lime had to be imported, and cement had not yet been invented; time and labor they did have, and in consequence instead of being built of rough, irregular shaped stones, with the interstices filled with mortar, their walls were built of square stones with level beds, competent to stand without any cementing together, and secured against intrusion of the wind and rain by the filling of the chinks with clay, just as had been the case in the log cabins which had been their first homes." The earliest houses, we are told, had roofs of a single pitch; only the later examples illustrating the familiar "Dutch" or gambrel type of roof. This mode of construction should be considered one of America's greatest contributions to home building art: "for small houses it is invaluable, for the reason which probably caused its invention, since it permits a greatly increased space in the second story without making necessary a roof of tremendous height."

It may be safely said that of all our shackle-free Colonial building styles the Dutch type was freest from the observance of tradition. Witness in this connection so important a detail as the col-

umn. This illustrates a fairly close adherence to tradition in the South, tremendously attenuated proportions in the North, though with a rough retention of classic proportions, and in both of these regions the shafts are round and frequently channeled. On the other hand, the Dutch examples are very often square or "carpenter-built," hexagonal or octagonal, square ones being sometimes paneled, and capitals savoring of Gothic rather than of classic precedents in many cases.

The Dutch style was never monumental, nor adequate to the purposes of a mansion of great size or of formal character. Stateliness was beyond its scope, as it was also beyond the Hollander of the old country where to this day the general manner of architecture is decidedly opposed to formality. The prevailing cast of the Dutch Colonial house was in the direction of the picturesque and home-like.

Mr. Embury's study of the genesis of the architectural manner of New Holland is followed, in the volume under discussion, by a fine chapter on materials, which has much to teach us; then by a detailed treatment of gambrel roof construction, illustrated by old as well as by modern examples of its use; by an equally good chapter on doors and windows, and another on the old Dutch plan and its modern counterpart. Shorter discussions of the treatment of the principal interiors, of furniture and of decoration are likewise included. The book is profusely illustrated with photographic reproductions and also with drawings of construction details and of plans. A number of illustrations of modern adaptations of the Dutch style, of which Mr. Embury is an ardent and probably the foremost exponent in current practice, are also included. All told, the volume is a useful contribution to a poorly understood building phase which merits greater attention in modern residence architecture, for the reason that it offers a highly attractive solution, with the assurance of effective simplicity, for the problem of small house design.

In the same series, *The Country House Library*, a collection of "architectural

books for the layman," also appeared a more general volume entitled *Architectural Styles for Country Houses* (Large octavo; pp. 123, ill. New York: McBride, Nast & Company; 1912. \$2 net), a symposium on ten different modes of building in use in this country, derived in part from Europe, in part from our own hard bought experience, and in part from combinations and adaptations of both. The essays aim to show the characteristics and merits of various types of architecture which have at different times found favor in the United States—both before and after its nationality became a fact—the modern feasibility of such types and somewhat of their history. The papers were written by ten enthusiastic advocates, under the general editorship of Henry H. Saylor, whose constructive genius furnishes the chief impetus for one of our foremost periodicals, *Country Life in America*. The volume contains an exposition of The Colonial House by Frank E. Wallis, whose name we have had occasion to note in connection with several volumes on the same subject earlier in our series of collective reviews, and another on The Dutch Colonial House by Aymar Embury II. No doubt the last named was the nucleus about which grew the volume on the style of the New Holland colonists noticed above. Other papers, of less interest for us at the moment, are concerned with Tudor Houses, by R. Clipston Sturgis; Modern English Plaster Houses, by J. Lovell Little, Jr.; Italian Adaptations, by Louis Boynton; The Swiss Chalet Type, by Louis J. Stellman; The Spanish Mission Type, by George C. Baum; The Half Timber House, by Allen W. Jackson; A Style of the Western Plains, by Hugh M. G. Garden; and The Northern Tradition, by Alfred Morton Githens. The general purpose of the book is clear; it presents a careful exposition of each of the most prevalent building styles at present in use, so that, above all, the otherwise unguided lay reader may in his selection avoid the pitfall of haste which is followed by the usual aftermath of repentance at leisure, for the style of his house, once chosen and put into execution, abides with him beyond

remedy. It is gratifying to note that the two papers chiefly concerning us, those by Mr. Wallis and Mr. Embury, have each been granted relatively more space than the individual chapters covering any other style treated in the book; we are also pleased to find the volume illustrated not only with the usual photographic reproductions, of which there are more than sixty, but also with plans in the body of the text. Perhaps by dint of untold perseverance the layman may ultimately be brought to an understanding of the value of the plan of his house and an appreciation of its significance as a prime factor in his future comfort and convenience, if not in his attitude toward life. To the average person of his tribe a plan is an utterly inscrutable thing; it savors too strongly of architects, of professionalism, of expense. However readily he may admit its usefulness, he restricts its scope to the builder and has been content himself to dwell in ignorance of its hidden virtues. We cannot have too many plans in books destined for the perusal of laymen; the more the layman sees of plans, the better will be his opinion of the architect, a type of thoroughly necessary expert that has too long been counted among the luxuries in the humbler phases of domestic architecture.

Among the numerous works on the Colonial aspect of our architectural history none have enjoyed so continuous and extensive a vogue as works of constant reference—with the possible exception of *The Georgian Period*—as have those of Eric Ellis Soderholtz and James M. Corner. The first of these gentlemen issued a general volume entitled *Colonial Architecture and Furniture* (Folio, pp. 6+60 Boston: G. H. Polley & Company; 1895. Rare). This was preceded by a volume concerning Colonial architecture in the New England states and followed by two others on the southern manifestations of the same style. In the last named Mr. Soderholtz collaborated with Mr. Edward Andrew Crane. In the volume on New England Colonial architecture Mr. Soderholtz was assisted by Mr. Corner. All of these works are now rarely found. The books in question are

properly collections of photographs of extant structures. Exteriors and interiors are given, but, of course, no scale details, plans or indications of construction are included. As photographs the plates have a peculiar value, for somewhat of the personal character and atmosphere of the original may be caught by the camera; but as adequate or complete works of reference on Colonial architecture they require the supplementary study of larger plates of line drawings which present accurate measurements of suggestive and well chosen details.

More recently has appeared *The Architecture, Interiors and Furniture of the American Colonies During the Eighteenth Century*, a collection of large folio reproductions selected by G. Henry Polley. (Pp. 5+plates 90. Boston: G. H. Polley and Company; 1914; \$40.) The point of view in this series is exactly the same as that of the other works just mentioned. The selection has been well made but the plates are in general not of the high quality maintained in the prototypes established by its predecessors of some twenty years earlier, some of whose plates it republishes.

From the professional point of view collections of photographs, such as those published in the Soderholtz and Polley books, are thoroughly useful as works of initial reference. They offer inspiration and suggestion and the architect is prompted at once to go to the more detailed studies which give him an occasional plan and, above all, do not ignore the inevitably essential section, a type of drawing that always conveys a mass of information in exact dimensions and proportions which the photographic perspective cannot be expected to indicate with sufficient accuracy. Being so accustomed to referring most fine arts to the sense of sight alone—even though the mode of execution constantly involves the third dimension—we come to rely too strongly upon the eye for a correct appreciation of depth, for the interpretation of which the sense of touch is the proper avenue. The architect's drawing of the section translates this reliance upon the sense of sight into terms of the sense of touch—optically as it were—and we are brought to feel

the significance of depth. We know of no more successful mode of presenting reproductions of buildings in all their parts than that of combining the perspective of the camera with the draftsman's plan and section. We have then at once a suggestion of constructive means and of interior heights and depths, as well as of exterior proportions. The plan gives exact dimensions and, in connection with the section, resolves the photograph into a diagram. If now we add some details at larger scale, perhaps with symbolic indication of materials, we shall have achieved the complete architectural reference work, the sort of book that must ultimately be the last resort when writers and publishers and architects have come to a full realization of the need for an authoritative body of works on Colonial architecture to supersede the numerous individual or regional books and to provide a general handbook of historical value and finality. Such a book or series of books would require and would readily obtain the sanction of important bodies of architects, if such bodies might not be held responsible for their inauguration as a contribution to architectural history in this country. We are glad to note that this mode of presentation of architectural work has latterly gained a certain amount of favor in certain quarters. Up to the present, however, it has been restricted to the publication of details, such as entrances, metal work and the like, and even these have been examples of current practice. We look forward to the appearance in the near future of other works planned on this basis, and offering complete studies of existing buildings of our formative styles in terms of proper combinations of photographs and drawings, appearing as far as possible on the same sheet and presenting an adequate method of visualization as an aid for the layman as well as for the architect.

Just as we go to press a new volume by Joseph Everett Chandler, bearing the title *The Colonial House* (Large octavo, pp. 8+341, ill. New York: Robert M. McBride and Company; 1916; \$2.50 net), has come to hand. Before we open the

book we are assured of its value, for the author enjoys an enviable reputation as one of the most serious and understanding students of the Colonial style, for which, in its manifestations during our early years both as colony and as nation, he consistently uses the name, *old Colonial*, no doubt to distinguish that sturdy architectural language from the many hybrid varieties of alleged Colonial derivatives that belong properly in the category of what he calls Kickapoo Colonial. Mr. Chandler's introduction and many paragraphs throughout his volume bring against the architect at large a scathing indictment of unstudied work, lack of taste, commercialism, and a lick-spittle subjection to the Boulevardesque of the Paris school. He gives a number of examples of the shameless descent from the old Colonial sublime to the alleged modern Colonial ridiculous. The book is of use to architects and laymen alike, and if its precepts are taken to heart such a self castigation among practitioners will result that the tasteless reproductions so casually foisted upon a public only too eager to live in Colonial houses will be forever consigned to the limbo of the architecturally unfit.

The general body of his text Mr. Chandler subdivides chiefly into a study of the style historically and aesthetically in detail treated in three stages or periods. The characteristics of each are carefully brought to light and profuse illustrations, some of them of entirely new material, serve to enliven the well written discussion. This general treatment is preceded by a chapter on The Plan and the Roof and succeeded by others entitled The Downfall, which makes short shrift of the Colonial mannerism which paralleled the black walnut craze and the pinnacled and crimped furniture that is within the memory of all of us, and Restorations, covering a number of successful efforts at modernization of old buildings. Then follows an enlightening chapter of admonition on What Not to Do, which, coming from an architect, carries particular weight, and another on Modern Work which gives credit where credit is due, but sparingly. The final section on Colonial Gardens deserves much praise,

for it was written by a lover of music and of poetry; in fact, in many places in his book Mr. Chandler rises to stylistic heights that give a new dignity to the subject of his discussion, for his manner of writing provides a readable work as well as an entirely adequate treatment of a field that merits and is gradually receiving a constantly increasing amount of attention and interest.

No writer on Colonial architecture can close his volume without a note of warning; with similar prophetic feeling Mr. Chandler adds his own: "One reason of the dislike some people have of Colonial houses undoubtedly results from the mental picture uppermost in their minds when the subject is mentioned. Then there 'flashes on the inward eye' the deeply shaded, tree-crushed facade of some old mansion of distinguished but grim individuality—trees planted too closely, untrimmed and uncontrolled, and shrubs unkempt and misplaced, marring that effect of cheerfulness which is of utmost importance—unless the person occupying it wishes to be judged as possessing a forbidding personality. All through the country are fine examples of the early work dropping in pieces, and the altogether attractive entrance gate of some once beautifully kept estate which today hangs on rusted hinges that will open the sagging gate perhaps but once more, and may tomorrow break and drop its burden, with the result that it will be propped against the adjoining fence a few days and then be carried to the wood pile on its way to serve as kindling wood. Much fine furniture has met a similar fate and the danger of like catastrophe still lurks in unappreciative sections of the country."

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Fire Protection and the Schools.

Recent loss of life in a schoolhouse fire at Peabody, Mass., and in a candy factory conflagration in the Williamsburgh district of New York City has brought about renewed activity in behalf of proper protection against fire in loft buildings and schoolhouses; but whereas the loft building fire could readily be laid at the door of neglect, coupled with flagrant disregard of existing laws, the schoolhouse fire is ascribable only to neglect, without the spur of public corrective measures under the control of a state department. Thus, although the state of Massachusetts has authority to regulate existing fire-escapes with reference to capacity, number and bearing strength, that sovereign state has, on the other hand, no authority whatever under the law to condemn for school use any buildings not provided with fire-escapes at all.

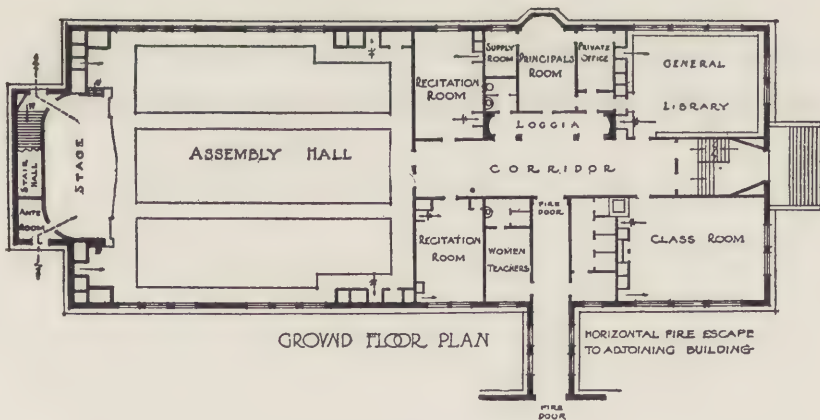
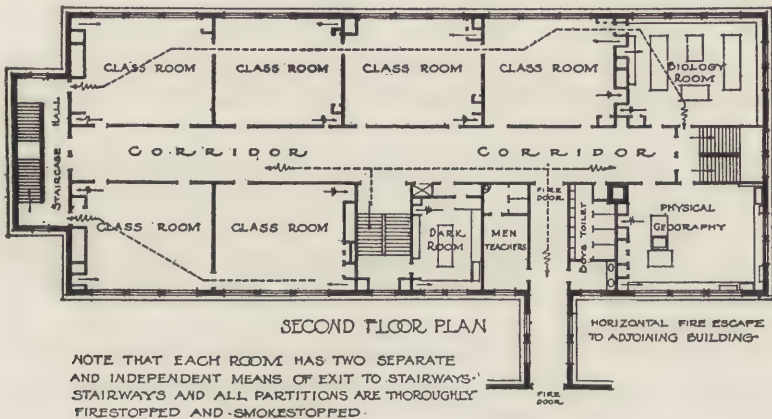
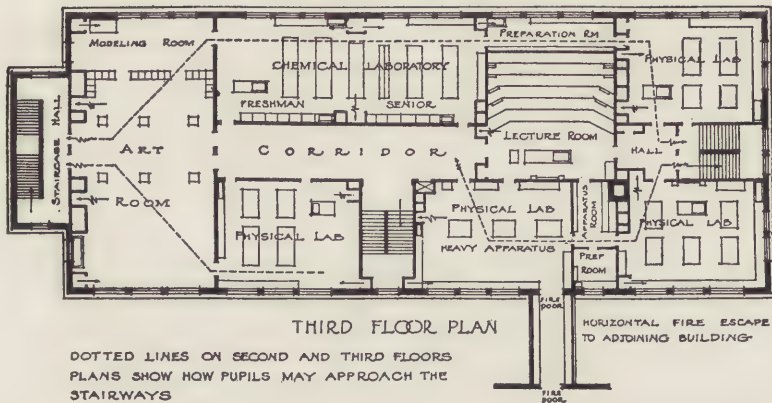
In the factory, where attendance is voluntary, remedial measures are possible; in the schoolhouse, where attendance is compulsory, no safeguard or public defense is forthcoming. The adult operative, subject to his own will, is protected; the child from six to fifteen years of age, controlled both by law and by parents, may be penned within a potential furnace without recourse even to the knowledge of his own danger.

This matter assumes an ominous importance if the facts concerning fires in recent months are considered. Thus it has been demonstrated that at least one schoolhouse fire occurs in the United States on each day of the year. During a period of sixty-eight days during 1915 no less than seventy-three fires were reported in schools and allied educational institutions.

With these threatening realities as a text, the National Fire Protection Association, with offices in Boston, has prepared a pamphlet giving much valuable data, compiled from various sources, on the subject of the

safeguarding of young lives in school buildings. The pamphlet inveighs strongly against wood construction, long corridors that almost instantaneously become giant flues, lack of proper isolation of heating and lighting plants, or of proper fireproofing of rooms assigned to specialized vocational departments using highly inflammable materials. It emphasizes the need for at least two doors for each classroom, frequent fire drills under all possible exigencies, the use of panic bolts and automatic sprinklers, and encourages a revision of current methods of stair construction with an eye to the disposition of exits proper and exit stairways upon a uniform axis and the elimination of all sharp angles on landings, and all diminution of width in vestibules or doors at the ends of stairways.

In 1910 the investigations of Frank Irving Cooper, an architect of Boston, undertaken at the request of the Russell Sage Foundation, brought to light the unbelievable fact that only two states in the Union had any regulations whatever for fireproof construction, and only one had considered fire retardant construction; six states had regulations governing exits, and thirteen required outward opening doors in schoolhouses. The discovery of this amazing condition of neglect and lurking danger resulted in much activity in a number of state assemblies, and the whole movement was brought to an exciting climax in 1914 when the newspapers espoused the cause of an engineer who had made a blanket condemnation of all New York City schools as fire traps. There followed then a thorough inspection and illuminating report by the Fire Commissioner of the city, whose department for the first time learned of the existence of acetylene gas plants and the storage of inflammable chemicals in cellars of school buildings; likewise of classrooms situated over automobile or plumbing schools, not to mention the total absence in many cases of any exit signs and the piling of highly combustible mat-

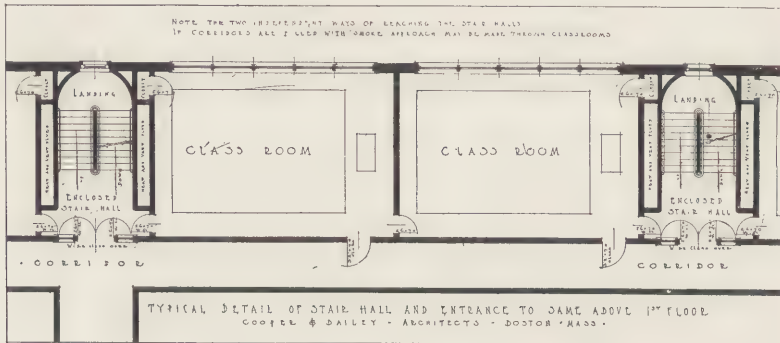


HIGH SCHOOL BUILDING AT BEVERLY,
MASS. COOPER & BAILEY, ARCHITECTS.

ter against boiler smokestacks. Corrective measures were put in force at once and anxious parents sighed in relief, though their anxiety had become a fact only as the result of published information, not by any means because of a previous personal interest. Then was undertaken the systematic abandonment of the oldest city school buildings, and the relegation of the last of these as entirely unfit for the purposes of the day will probably become a fact when the Gary plan—at present the topic of such acrimonious discussion—is finally ratified for general adoption throughout the five boroughs. This will reduce still further any existing fire hazard and the city will be justified in assuming that the ultimate precaution has been taken in safeguarding the lives of the growing generation.

Mr. Cooper has now come forward with further charted information to show the

A model plan, in which all safeguards to life have been fully considered, is reproduced herewith. The building is not of great size but is large enough to indicate similar solutions for buildings housing several thousands. It provides each classroom with exits to the main corridor, and in addition interconnecting doors are introduced to permit passage from room to room in case of sudden danger, a local disturbance such as an explosion, or in case of unavoidable delay in the corridor. The laboratories have been wisely isolated on the upper floor; there are three stairways, and a horizontal fire-escape to an adjoining building has also been provided. The stairways themselves are of the approved stairhall type, with wired glass enclosures; they all lead directly into the open, and each landing has been treated as a semi-circle in plan, so that the outer-



advances in the field of fire protection in schools during the period 1910-1915. His latest compilation shows "that only twenty-seven states have yet considered it advisable to exercise control over their school buildings, where the children spend one-third of their waking hours. Twenty-four of these twenty-seven states seem to realize the necessity for a quick exit from these buildings, as they specify, with exceptional agreement, that doors shall open outward. Seventeen of the twenty-seven states also agree that fire-escapes are desirable, but only six of the twenty-seven installed fire alarms to warn teachers and children that escape should be made, and only one state, Kansas, would drill its children in how that escape should be accomplished. Turning from escapes to methods of putting out a fire, it is found that eight states would provide fire extinguishers of various kinds; six states believe in standpipes (although there is some question as to the providing of any hose), and one state would have sprinklers under certain conditions."

most children in any hurried or mass exit of all classes cannot be crushed into angles of masonry while the main stream rushes by them to safety. In similar fashion the danger arising from the discrepancy in width between exit stairways and outside doorways has been removed by building the stairhall walls inward to the edge of the door frame. Thus the bitter lesson of a school fire at Collinwood, Ohio, where "scores of little children died within an arm's reach of safety, almost within sight of frenzied parents, jammed at the foot of a stairway in a solid arch of flesh and bone, skewed into projections caused by the lessened width of the vestibule," has been taken deeply to heart.

We cannot too strongly advise a country-wide interest in this patent menace of fire in schools. The obvious evils of slight construction, petty economy and ignorance too readily intrude upon good sense and safety in school buildings, as in buildings devoted to other purposes, involving the presence within them of a large number of persons

at a given time, especially if they be minors. Legislatures should have direct recourse to the foremost architects, engineers and experts in fire risks of their states in the drafting of fire protection legislation. The danger is as palpable and as preventable in many districts of this country as is the white plague itself. Finally, we can do no better than to emphasize the need for a general uniform system of fire protection, based at the outset upon fire proof construction, suitable exits and dependent stairway and corridor planning, isolation of inflammable materials both in storage and in departments using them in their instruction, provision for fire extinguishers, if possible, including an automatic sprinkler system, so that the danger may be promptly localized, and finally upon frequent and thorough fire drills in which all contingencies are provided for and all incidental duties properly apportioned among a limited number of reliable persons.

A set of eighty rules has been compiled by the New York Board of Education as a result of the careful investigation above referred to and in most instances are applicable to the schools of any town or city. They should be carefully studied by everyone charged with the heavy responsibility of safeguarding the lives of schoolchildren.

R. F. B.

The Residence of Mrs. R. L. Stevens.

This house, which is illustrated on pages 372 to 376, was built about twenty years ago; and the alterations and developments, which were undertaken within the past three years, have been made in conformity with the original character of the building and its setting on the edge of a wood with a commanding view down a valley to the southwest. The hill on which the house is situated was covered on its westerly slope with a young growth of wild cedars, and one of the most attractive features of the place is the cedar garden developed by the late Mr. Stevens by means of cutting alleys and winding paths through the growth of cedars and establishing points of interest at the terminations of the vistas so completed. Mr. Stevens, after his graduation from Columbia College, studied architecture in the Columbia School, and continued his interest in this subject, particularly in the development of landscape design. The work of Lord, Hewlett and Tallant, illustrated in the photographs and plan, con-

sists in the rearrangement and reconstruction of the house, the design of its surrounding garden treatment and the interior decorations, all of which was under the personal charge of Mr. Hewlett.

Federal Buildings.

In the planning of public buildings and especially of those to be used by the various branches of the Federal Government, interesting and unusual problems arise. While, like any other buildings, their first requirement should naturally be adaptability to the practical purposes for which they are erected and to the environment in which they are placed, they must in addition be of such a character as to fittingly suggest the dignity of the government which they represent. On the other hand, this idea of governmental dignity ought not to so obsess the designer as to induce him to strive only for monumental effect.

A certain uniformity of character in Federal buildings is also desirable in order that such structures may be readily recognizable, may suggest their official position and stand somewhat aloof from their more plebeian neighbors; yet it is equally desirable not to go to the other extreme of placing Greek temples in every community, be it a New England fishing village or some great commercial center, merely adapting them to varying conditions by the use of the diminishing glass or the magnifying glass as the size of the community may dictate.

In August, 1912, the act of Congress by which the Secretary of the Treasury had been authorized to select the architects for post office buildings by means of competitions, was repealed and the work was placed in the hands of the Supervising Architect of the Treasury Department. Himp-ered by red tape and occupied by political incompetents, as such offices frequently are, this might well have been expected to spell the doom of any progress in the architecture of post office buildings.

It is a gratifying surprise therefore to find, upon looking over recent examples of this class of buildings, that a high standard of excellence has been maintained. The half dozen illustrations on pages 369 to 371 were selected at random and do not by any means show the choicest work of this class, yet they do show a dignity and versatility that speak well for the ability

and training of the men who designed them.

We may readily accept it as evidence of a general advance in our present standards of architecture that a governmental department which, unlike the private practitioner, is not goaded on in its struggle for excellence by the sharp prod of competition and is more or less subject to the influences of political environment, should produce work as meritorious as is to be found in the post office buildings which are now being erected throughout the United States.

I. T. Frary.

Italian Parliament Buildings.

Following the unpromising precedent of the Palace of Justice and of Sacconi's egregious monument to King Victor Emmanuel, Italy seems to have been misled once more into the insidious evils of underestimation of costs and poor management of construction in its latest public building of importance, the National Houses of Parliament. The original appropriation assigned six and one-half million lire for the erection of this edifice; to date it has involved an outlay of nearly twenty million lire. Excavation was begun in January, 1908, and, although the maximum period of construction considered necessary at the time was four years, it still stands incomplete. Various speculations have been advanced as to the reason for the undue expense and long drawn delay. Italian dailies speak of inexperience, poor taste, incorrect specifications, and one of them, the *Domenica del Corriere*, flays the Roman building commissions, whose chief duty it is to watch the destinies of such buildings, for the effete administration of its important field, since every public building undertaken in the Imperial City involves avoidable strife and high feeling, suspicion or even actual trials at law, as in the case of the Palace of Justice.

Francesco Crispi first launched the pro-

paganda for a new national assembly hall; deeming unworthy of the new Italian nationality of the old Palazzo Montecitorio, erected by a nephew of Gregory XV. in 1630 from designs by Bernini, the architectural giant of the seventeenth century. Crispi was hailed as the foremost spendthrift of the land, a squanderer of the taxes of the poor; he was informed from many directions that the project would entail an expenditure of ten or even fifteen million lire. So it was decided to draw the national pursestrings tight and to restrict the whole plan to a remodeling of the old palace instead, leaving the Renaissance facade and adding spacious halls in the body of the structure. And now after a period of nearly eight years twenty millions have melted into a group of unfinished salons hiding their ornate details behind the stern old front of the Montecitorio. As the scaffoldings fall, says the *Corriere*, the Italian soul revolts at the travesty upon Bernini's work. The commission was assigned, without competition, to E. Basile of Palermo, who, maintaining that "each epoch must have its own language, its peculiar forms and its individual art expression," has coupled the design of his own additions and the older portion of the edifice with a minimum of concession to the latter.

It is not for us at this distance to point a moral in times of stress that make all public building activity appear in the light of unnecessary expense of funds needed for national defense. We cannot avoid, however, the sentiment that even though a national edifice, indeed the central national building of all, justly deserves an adequate expenditure both of time and of money, especially in a monarchic form of government, it likewise merits an equally lavish outlay of ability, care, good management and taste. The national pride is apt to hinge upon such a building, it is a point of departure for the broadest inspiration, or even imitation; it must be kept free of building errors, both structural and financial, and finally it must for patent reasons be a model of the finest professional talent of the land.

R. F. B.

THE
ARCHITECTURAL
RECORD

CONTENTS

J. M. ROSE

COVER — A COLONIAL DOORWAY		Page
THE Y. M. C. A. COLLEGE IN CHICAGO.	Emery Stanford Hall, Architect By Peter B. Wight	395
GOTHIC ARCHITECTURE AND ITS CRITICS.	Part II. The Definition of Gothic " " " " " " " "	419
	By A. D. F. Hamlin	
AN ARCHITECTURE OF DEMOCRACY.	Three Recent Examples from the Work of Louis H. Sullivan " " " " " "	436
	By A. N. Rebori	
PORTFOLIO OF CURRENT ARCHITECTURE	" " " "	466
THE NEW YORK CITY HALL.	Part II. The Work of Restoration " "	474
	By Charles G. May	
THE ARCHITECT'S LIBRARY:	The Famous Iron Work of Spain, By Marrion Wilcox; A Manual on Lighting, By R. F. Bach " " " "	491
NOTES AND COMMENTS	" " " " " " " "	495

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WEST LOBBY ON FIRST FLOOR, SHOWING DOOR INTO
NATATORIUM ON THE RIGHT AND ENTRANCE TO SOCIAL
ROOM IN THE CENTER—Y. M. C. A. COLLEGE, CHICAGO.

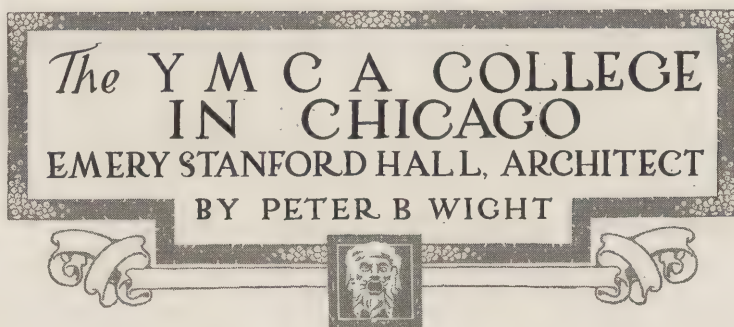
THE ARCHITECTURAL RECORD

VOLUME XXXIX



NUMBER V

MAY, 1916



TO find a new building, the first of its kind, planned as the result of an infinite amount of study and patient investigation covering a number of years; designed with due regard to its artistic effect, and in a spirit of independence of the influence of architectural precedents; executed with the best materials obtainable; handled by skilled workmen, in whose labor neither undue extravagance nor enforced parsimony has been practiced, and built for a noble, righteous and enlightened purpose, is seldom the fortune of an architectural critic and raconteur. Such I believe to be the qualities of the new Young Men's Christian Association College recently completed and dedicated to its high Christian purpose last December. It is located in the

Hyde Park district of the city of Chicago, which is in the south division of that city, between Jackson Park on the east and Washington Park on the west only three blocks north of the University of Chicago, and, most important, in what has always been a prohibition district. Its site is an entire city block, bounded by Fifty-third Street on the north, Fifty-fourth Street on the south, Drexel Avenue on the west (on which is the main entrance to the campus), and Ingleside Avenue on the east. The numbered streets in this part of the city are not always continuous. A section of Fifty-third Street from Washington Park at Cottage Grove Avenue, two blocks west, abuts the west side of the campus near its center, where the main entrance gate

is located. The campus is 470 feet long from north to south and 220 feet wide. The new building is on the north end and will occupy 220 by 175 feet when the east wing or dormitory is completed, leaving a quadrangle in the center, open to the south, 110 by 135 feet. The remainder of the ground is a park for athletic games, which are part of the curriculum of the College.

The objects and purposes of this building are such as have never before been realized in an architect's design, and when laid before the architect, Emery Stanford Hall, engaged his attention for three years until his perfected drawings had been completed. The Young Men's Christian College is not part of that great organization known as the Young Men's Christian Association, whose buildings may be found in every important city in America and in many others throughout the world. It is an independent organization, but intimately related to it; and that whose new building is here illustrated is only the second one ever organized in this or any country. The first organization is in Springfield, Mass., and its buildings are on the pavilion plan; that is, while its origin is earlier than this one, it uses a number of buildings covering a large area of ground and is not located in the heart of a great city as this is. Therefore, this building is the first of its kind ever erected in which all the departments are comprised within one structure, though some of them are duplicated in its summer school where it was originally organized at Lake Geneva, Wisconsin. This is still retained and some of the departments are transferred to it during the summer months. There it is conducted as an encampment, though there are few permanent buildings on the site.

But the *raison d'être* for the organization of these two great institutions must first be made clear, though it might be inferred from their names. They were organized to educate and practically train the officers and principal employees for 788 Y. M. C. Associations throughout this country and abroad, with a membership of 625,000, and controlling property to the value of \$88,000,000. But wherein

they differ from all other educational institutions is that graduates from these colleges, with degrees conferred and certificates of competence for all the administrative and educational positions in the Associations, go out upon the world, not to look for a job, but with assured positions for life waiting for them in hundreds of places. The colleges are the technical training agencies of all the Associations for preparing their employees for efficient service. Three distinct dominative motives prevail—physical efficiency, intellectual and vocational efficiency and moral and religious efficiency. Probably no college provides for the training of body, mind and heart with more even balance than does the Association College.

A Training School was first suggested in 1890, and on June 27th of that year was incorporated. Its work was done both at Geneva and in the building of the Y. M. C. A. at Chicago. In November, 1913, its name was changed to that which it now bears. Ground was broken for the Chicago building October 16, 1914, and it was dedicated December 1, 1915, after many delays caused by labor strikes.

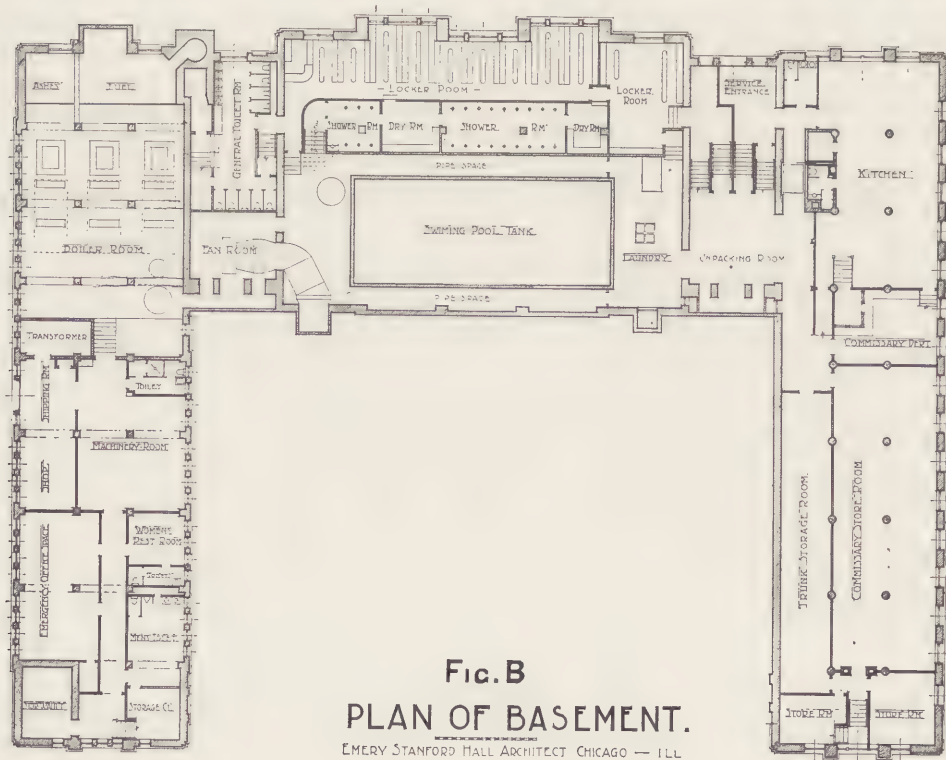
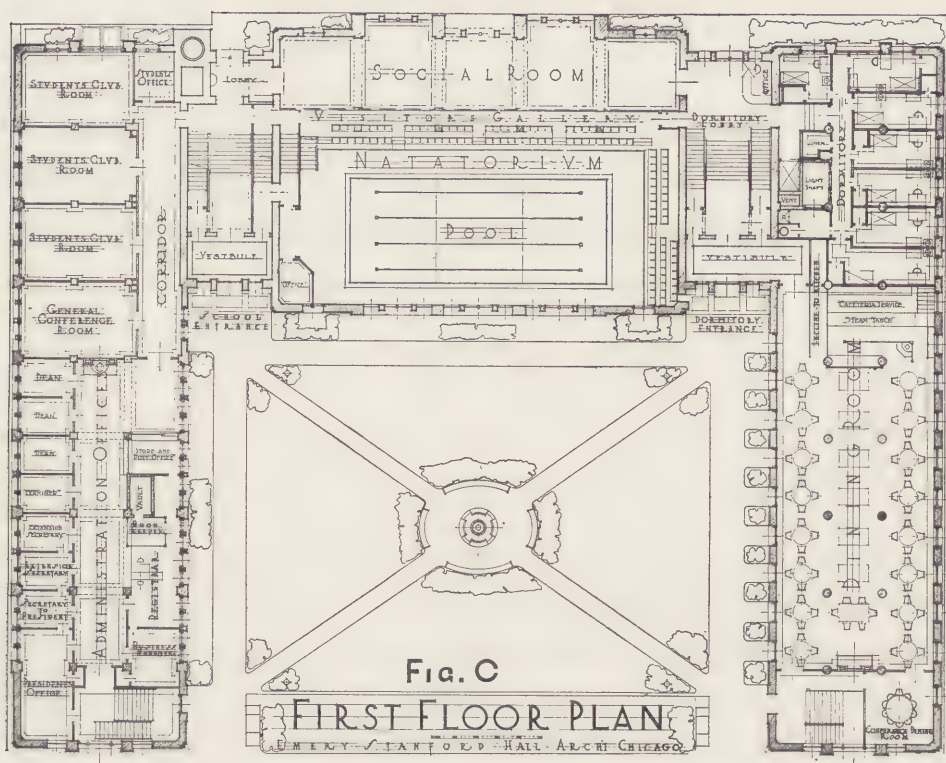
The proposed buildings were first taken up for discussion with the architect in December, 1910, and an outline of tentative requirements submitted. This was before a location had been selected, and was while the College was occupying, for all except its summer sessions, rented quarters located in the Association Building, Chicago. The College, as has been said, has always operated a plant of its own for its summer sessions, located at the north end of Lake Geneva in Walworth County, Wisconsin, not far from Williams Bay Post Office.

Mr. Hall has explained to me the considerations that affected him in laying out the plan of the building in the following words, which clearly state the reasons for what he has done:

"From the very beginning, owing to limited funds available, the fundamental considerations in design have been to secure the maximum of convenience, stability and ease of maintenance at the minimum of cost. Nothing was to be in-



BLOCK PLAN—Y. M. C. A. COLLEGE, CHICAGO.
EMERY STANFORD HALL, ARCHITECT.



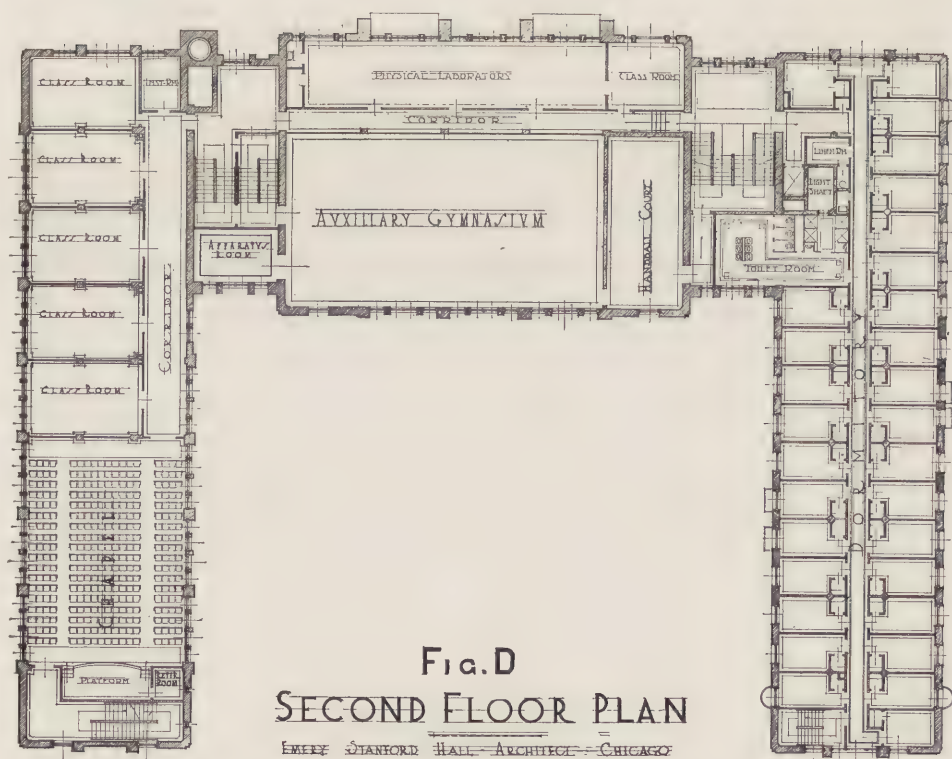




FIG. 2. ENTRANCE GATE TO QUADRANGLE FROM DREXEL AVENUE, OPPOSITE FIFTY-THIRD STREET, NEAR WASHINGTON PARK-Y. M. C. A. COLLEGE, CHICAGO.

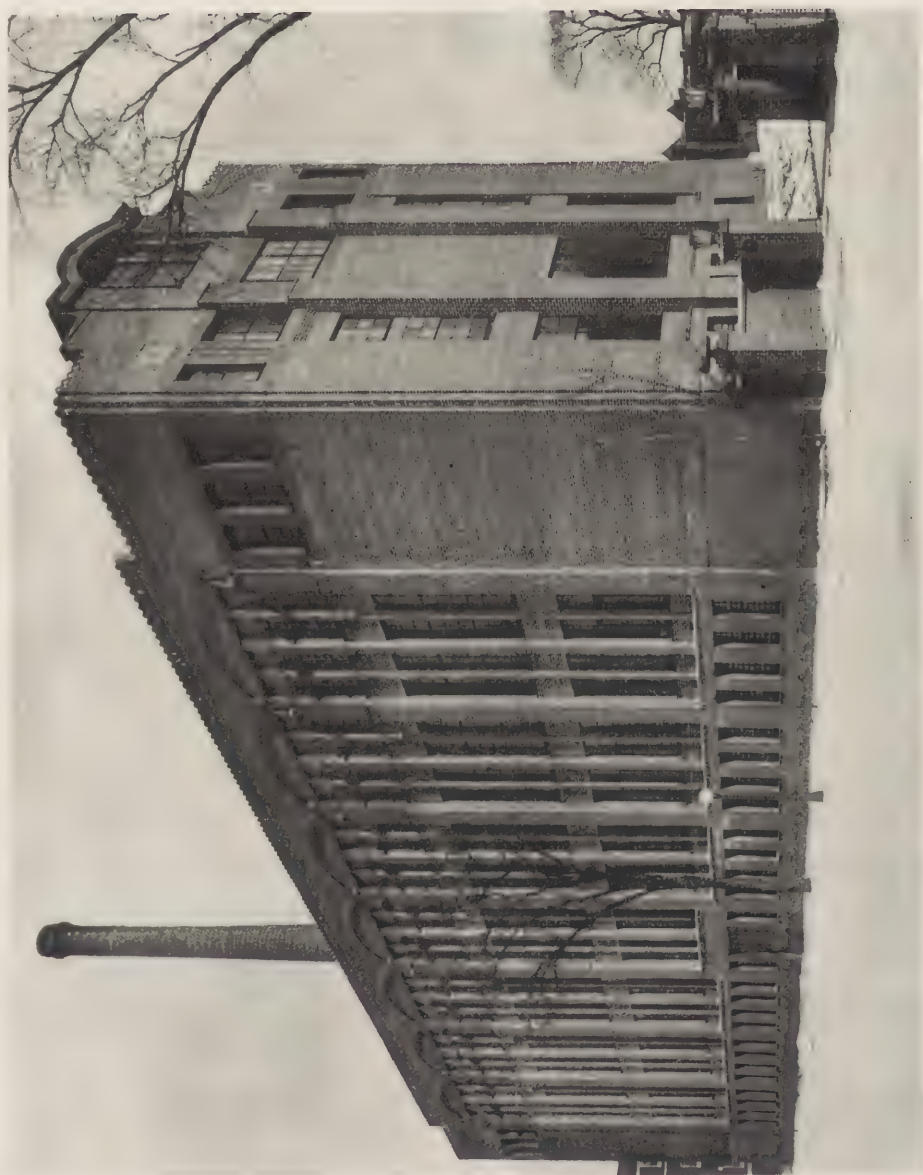


FIG. 1. VIEW OF DREXEL AVENUE SIDE
AND ENTRANCE GATEWAY FROM SOUTH-
WEST.-Y. M. C. A. COLLEGE, CHICAGO.

incorporated in the design that was not enduring, and the essential functions of the building were to be provided for so as to secure the highest degree of efficiency, the best separation of functions and the most convenient relation between parts. It was soon seen that the problem divided itself into three rather distinct and widely diversified requirements. First: There was the Department of Class Room Instruction, including recitation rooms, laboratories, lecture rooms and the Department of Administration; all of which required the maximum of light and quiet. Then there was the Department of Physical Education, which required natatorium, gymnasiums and physiological laboratories. Then there was the Department of Residence, including the dormitories, dining room, kitchen, etc.

"Of necessity the Department of Physical Education during operation was likely to produce a great deal of noise, which would interfere seriously with the Department of Class Room Instruction, or the necessary use of the Department of Residence for studies. These requirements suggested the arrangement of plan which placed the Department of Class Room Instruction and Administration in a single section with its principal rooms facing on Drexel Avenue, and with corridors between this Department and the stair tower separating the Department of Physical Education from the Department of Class Room Instruction, thus completely isolating the class rooms and offices from the noise and confusion incident to the operation of the Department of Physical Education. And as a matter of balance and separating the Department of Residence from the Department of Physical Education, the Department of Residence was placed in an east wing of corresponding size to the west wing containing the Department of Class Room Instruction. In the matter of design it was attempted to express uses to which the various departments are put, by the handling of the exterior. For this reason the west wing was made extremely plain, consisting merely of a series of narrow brick piers separating windows so as to give the maximum of glass opening and so as to

reveal from the exterior the fact that this entire section was used for assemblage purposes.

"A study of the natatorium problem made it clear that one of the most important essentials for such a room was an ample supply of sunlight. For this reason this room was placed on the south side of the central section, and located on the ground floor level, so that the room was flooded with sunlight from the south through prismatic glass windows. As it was desired to avoid exterior steps, and as drainage conditions required that the natatorium should drain naturally into the sewers without the use of pumps, the central forecourt was raised in grade about five feet above the street grade, thus adding a desirable landscape feature and affording a means of disposal for the earth taken from the excavations, materially reducing the cost for this portion of the work, and requiring neither the purchase of filling nor the cartage away and disposal of earth. This arrangement gives the basement of the building ample window space on the street elevations. Originally it was planned to have a corridor running through the central section of the building to connect the two wings. This was arranged for the north side of the natatorium. After further study it was decided that by widening this corridor and adding two projecting bays it might serve for the purpose of connecting the two outer wings of the building and at the same time act as a social or lounging room adjunct to the residential section of the building, and yet be available for social purposes on special occasions, when the administrative offices and club rooms could all be connected together and the dining room on the ground floor of the residential section used in such a way as to make practical the use of the entire main floor of the building for large social gatherings."

The second floor of the central section contains the small gymnasium, approximately 42 feet by 72 feet, for teaching special gymnasium work, and illustrative of the character of work which may be done in small gymnasiums, such as are usually provided in the smaller associations. A physiological laboratory

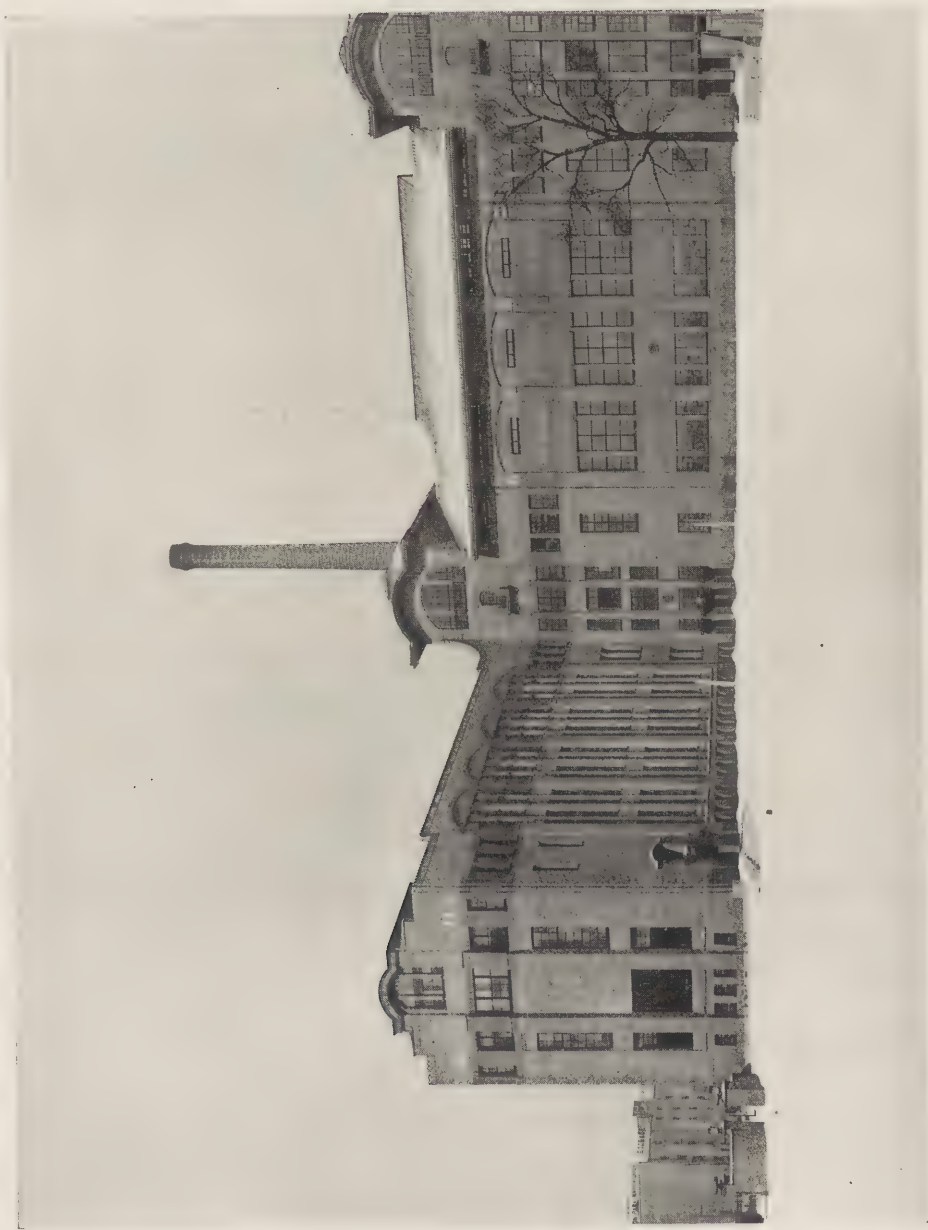


FIG. 3. GENERAL VIEW FROM ATHLETIC
FIELD-Y. M. C. A. COLLEGE, CHICAGO.



FIG. 4. WEST TOWER AND PRINCIPAL ENTRANCE
FOR STUDENTS—Y. M. C. A. COLLEGE, CHICAGO.



FIG. 5. DETAIL OF ENTRANCE FOR STUDENTS—Y. M. C. A. COLLEGE, CHICAGO.

room, approximately 50 feet by 90 feet, is provided in this story, with floor at a higher level on account of not requiring such a high ceiling, and with north light, best suited to microscopic work; this room being intended for the use of microscopic research and the study of the physiology of exercise. The third floor, together with a gallery on the fourth floor level, contains the main gymnasium, occupying the entire area of the central section. This gymnasium was arranged so that it may be divided into two smaller gymnasiums by the use of a net in the center of the room, for special games. A peculiar feature of this gymnasium is its lighting by the means of a large north saw-tooth skylight, thus making it possible to flood the room with natural light and yet avoid shadows which are so objectionable in playing indoor ball games, and also making the light especially easy to the eyes. It was the original intention in the design of trusses for the support of the roof over this room to allow the steel structural parts to be exposed, but it was found that owing to a late ruling of the Building Department of the City of Chicago all members would have to be fire-proofed, and so they were fire-proofed by covering with metal lath and Portland cement plaster, built up in thickness to comply with the requirements of the city ordinances. It will be seen from the illustrations that sufficient open space is left in these trusses so as not to interfere with the effectiveness of the lighting.

The east section of the building when completed is to contain a dining room with its floor on a level with the forecourt terrace, and French windows opening on to the terrace; this room being entered from the east tower vestibule, and securing the necessary ceiling height for such a room by extending from the ground up to the ceiling of the first story of this section; so that in the north end of the east section the kitchen is placed on the street level and above the kitchen is placed a series of low story dormitories; there being an incline leading from the kitchen up to the dining room floor level.

The three upper floors of the east section are to be devoted entirely to dormitory rooms; this section of the building will contain one hundred dormitory and study rooms.

It will be noted that the east section is to contain four stories, while the west section only contains three stories, and yet the outline of the two sections is similar, the difference being on account of the heights of stories.

The difficulty in the handling of a design of such diversified story heights and room area has been overcome by building two stair towers between the sections and running the stairs parallel to the sections, thus making landings on two levels on each side of the stairs, which, with a little juggling, makes it possible to enter from one side of the stair into the dormitory section containing stories for dormitory rooms about nine feet in height; or into the central section containing stories about twenty-two feet in height, out of the same stair tower. The same arrangement also works out for the west stair tower between the Physical Education Department and the Class Room section.

It was expected that the development of the work would soon require a dissecting laboratory, but such a department is ordinarily rather odoriferous and quite objectionable when contiguous to other parts of a building. Arrangements were therefore made for such a laboratory lighted with skylights and small windows underneath the roof of the west tower, forming a room approximately 20 feet by 40 feet, completely isolated from the rest of the building. A corresponding room in the east tower will be used as an overflow dormitory.

In the exterior design of the central section, a great problem to provide the maximum of window space in the natatorium and small gymnasium, and practically eliminate window space, except small ventilators, for the large gymnasium on the third floor, was solved. To eliminate the apparent overloading of light stories and solid wall without openings on upper stories, brick buttress piers with deep reveals were used, and brick



FIG. 6. CENTRAL, OR GYMNASIUM SECTION, FROM ROOF OF WEST WING—Y. M. C. A. COLLEGE, CHICAGO.

panel work, worked out in patterns, is inserted under segmental arches spanning from pier to pier.

In the east section it is intended to express the nature of its occupancy, consisting of small rooms, by the use of simple, single openings in the brickwork, spanned with plain segmental arches.

The problem of adequately tying together in one building sections of such diversified use and purpose has been solved by making the base of the building up to the level of the main floor of a smooth, round cornered, dark paving brick, with horizontal joints raked out and the vertical joints made flush, cutting the windows and doors through this base course at the various levels re-

quired to meet interior conditions, thus forming a band around the base of the building by means of color. Then the shaft of the building, extending from the base up to the third story window sills of the class room section, is faced with a complete kiln range of rough texture or wire-cut brick. A band course forming the window sills of the third story windows and the piers between the third story windows is formed entirely around the building of smooth red brick. Above this point the kiln range rough texture brick are used up to the band course underneath the coping, except that these brick are laid up in Flemish bond. All rough color brick are laid with joints of natural color lime

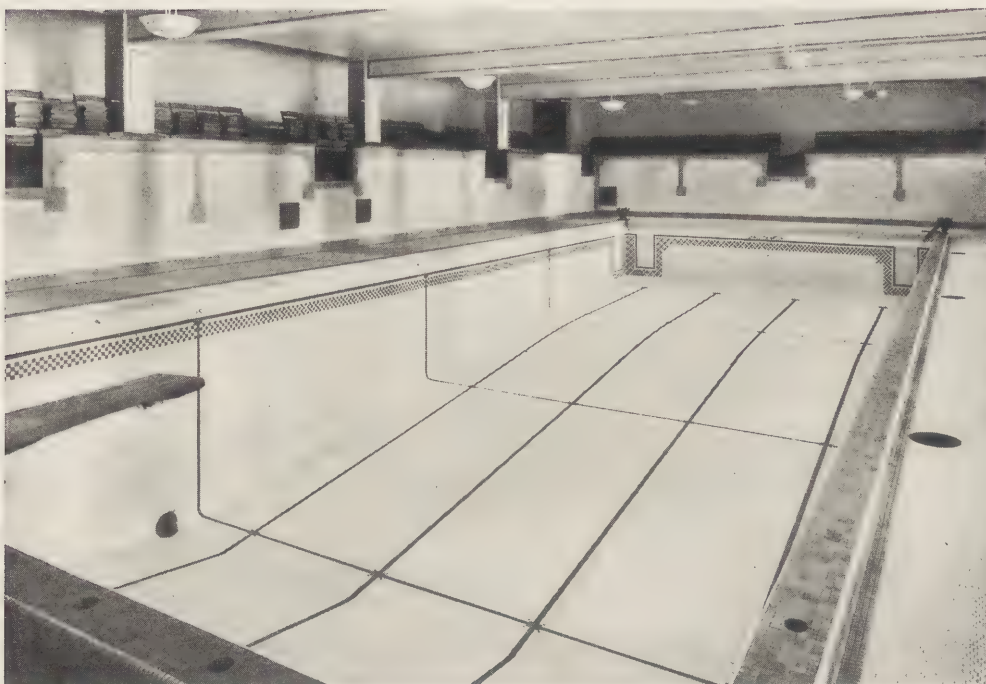


FIG. 8. SWIMMING POOL BASEMENT IN ATHLETIC SECTION—Y. M. C. A. COLLEGE, CHICAGO.

and torpedo sand mortar, ranging from 5/8 inch to 3/4 inch in thickness, cut flush, so as to make a rough joint.

The walls of the west section are coped with green Spanish tile terra cotta coping corresponding with the color of the Spanish tile roof of the central section. Roofs of the towers and central section are extended over the wall about five feet, so as to form a wide overhanging cornice, which is to protect ventilators to the rooms located in the top stories of the towers and gymnasium section, allowing these windows to remain open during stormy weather. The soffits of these overhanging roofs are finished with rough cast Portland cement stucco. The two principal entrances, one located in the east tower between the dormitory section and the gymnasium section, and the other located in the west tower between the class room section and the gymnasium section, while sufficiently symmetrical to satisfy the eye, are quite diverse in actual arrangement due to structural and plan requirements. (See Fig. 5.) Both are finished with rough red brick

trimming and coarse stucco walls. The lower portion of the vestibules and stair halls up to the second landing is lined with a low wainscoting or dado consisting of a brick "soldier" course, a course of "quarry" tile and a brick row-lock top course. Panels here and there are worked in with special designs in tile. (See Frontispiece.)

Thought has been given to provision for further growth, it being contemplated that sections corresponding to the east and west wings may be erected on the southeast and southwest corners of the lot, with possibly a low one-story assembly hall between the two, so as to not cut off the sunlight from the south, and with a tower for administrative purposes located at the head of Fifty-third Street, facing Washington Park and the nearest approach to transportation on Cottage Grove Avenue. The intention is that all student entrances to the building shall be from the quadrangle, thus facilitating supervision, and that all service entrances to the building shall be from the streets, thus entirely eliminating service from the quadrangle.



FIG. 10. SOCIAL ROOM ON FIRST FLOOR; MID-
DLE SECTION, WITH LIGHT FROM NORTH
SIDE-Y. M. C. A. COLLEGE, CHICAGO.



FIG. 11. VESTIBULE OF ENTRANCE TO DORMITORY SECTION AT EAST END OF GYMNASIUM SECTION—Y. M. C. A. COLLEGE, CHICAGO.

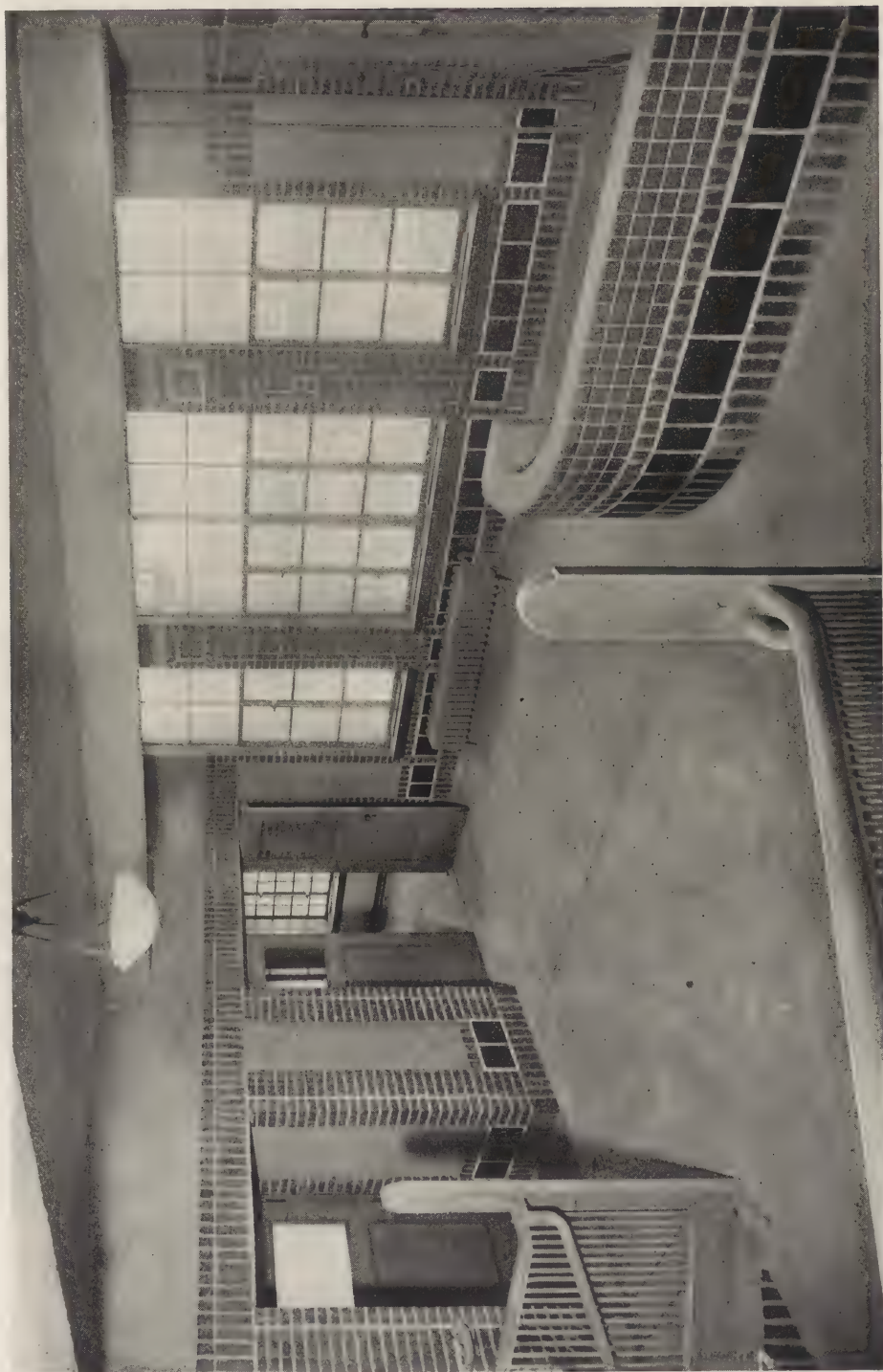


FIG. 12. EAST LOBBY ON FIRST STORY OF MAIN BUILDING AT FOOT OF STAIRWAY, SHOWING ENTRANCE TO VISITORS' GALLERY IN NATURAL HISTORY MUSEUM AT THE LEFT, TO SOCIAL ROOM IN THE CENTER, AND UNFINISHED COUNTER ON THE RIGHT—Y. M. C. A. COLLEGE, CHICAGO.



FIG. 13. LOBBY FOR GENERAL OFFICES, LOOK-
ING NORTH—Y. M. C. A. COLLEGE, CHICAGO.



FIG. 14. DRINKING FOUNTAIN AT NORTH END OF GENERAL OFFICE LOBBY. Y. M. C. A. COLLEGE, CHICAGO.



FIG. 17. MAIN GYMNASIUM ON THIRD FLOOR, CENTER SECTION, SHOWING ILLUMINATION THROUGH NORTH SKYLIGHT, THUS AVOIDING SHADOWS; STEEL TRUSSES FIREPROOFED WITH CONCRETE—Y. M. C. A. COLLEGE, CHICAGO.

The mechanical plant which serves this building is of necessity complicated, on account of diversified demands, plumbing, heating and ventilating being very important items.

In general, all class rooms, club rooms, and the natatorium are provided with mechanical ventilation separate and distinct from the heating system, air being forced into the rooms just above the floor and at the outer wall in the corners of the rooms at a temperature slightly above 70 degrees and exhausted from the rooms near the ceiling and on the walls between the rooms and corridors, the corridor ceilings being furred down so as to make provision for ventilating ducts. The air intake is located in an area on the outside of the building opening into the quadrangle, which is surrounded with shrubbery so as to secure air as free as possible from dust. The air entering the building passes over tempering coils and then down through a fan. It is driven to various parts of the building where required, making use of

a vertical pipe shaft next to the smoke stack. Foul air is collected through ducts from the various corridor ceilings, carried to the pipe shaft beside the smoke flue and up to the top of the tower, where it is exhausted by means of a ventilating fan. Both ducts are in the same shaft.

An interesting feature of the plumbing installation is the manner of heating and filtering the water for the natatorium tank. The arrangement of valving in pipes is such that water may be taken direct from the city main into the tank, or through the filter into the tank, or through the circulating pump and filter into the tank, or through the heater and filter into the tank, or from the waste outlet of the tank through the circulating pump, the heater and the filter and back into the tank; it being planned to keep the water in constant circulation by means of the circulating pump and to maintain its temperature constant by passing it through the heater or by-pass, regulated by means of an automatic tem-



FIG. 15. CHAPEL AND SECTION ROOM ON SECOND FLOOR OF WEST SECTION, SHOWING REINFORCED CONCRETE GIRDERS IN CEILING WITH SPAN OF THIRTY-EIGHT FEET—Y. M. C. A. COLLEGE, CHICAGO.



FIG. 16. LIBRARY ON THIRD FLOOR OF WEST BUILDING, SHOWING PLAIN REINFORCED BEAMS WITHOUT DECORATIVE MOULDINGS, SPAN THIRTY-EIGHT FEET—Y. M. C. A. COLLEGE, CHICAGO.



FIG. 18. GENERAL VIEW, FROM THE NORTH-
WEST-Y. M. C. A. COLLEGE, CHICAGO.

THIS IS A PHOTOGRAPH OF THE BUILDING TAKEN FROM THE NORTH-WEST CORNER OF THE COLLEGE. THE BUILDING IS A LARGE BRICK BUILDING WITH A GABLED ROOF AND A TOWER IN THE CENTER. THE PHOTOGRAPH IS ORIENTED HORIZONTALLY ON THE PAGE.

perature regulator, and keep the water perfectly clean and pure at all times by constantly circulating through the filter, thereby constantly refiltering.

Water pressure, which is not sufficient in the city mains to furnish adequate supply in the upper stories, is maintained by means of a steam pump and a pressure tank located in the basement. Pipes for different uses are painted different colors to make distinction easy.

Fire protection at a minimum of cost is provided by provision for yoking together a battery of four of the steam pumps which ordinarily serve for other purposes, thus making available the combined power of these pumps and the reserve storage of water contained in the swimming tank.

Provision is made against scalding in the battery of shower rooms by placing an automatic regulator on the hot water supply of these rooms to regulate the temperature so that it cannot be raised to the scalding point; and also an attempt has been made to eliminate the evil effects of varying pressure by making the water supply pipes to these showers largely in excess in capacity over the maximum demand that could be made if all showers were used at the same time.

In the construction of this building, not only have means been provided for extinguishing a possible fire, but all the materials that have been effective in the best fireproof structures have been used. For structural purposes steel columns have been used in the walls where they have to support girders or trusses of long span, while reinforced concrete columns have been used in brick piers where practicable. Some of the girders up to a span of 38 feet are of reinforced concrete (see Fig. 16), while others, as, for instance, those under the gymnasiums, are of built up steel protected by hollow tile. Generally the floors are constructed with concrete slabs and tension bars, with hollow tile fillers. Everywhere the floors are finished with cement or tile, except in the two gymnasiums, where they are of hard wood. Only such woodwork as has been absolutely necessary has been used for the inside finish and doors, all of which are of red gum. The whole build-

ing therefore is not only fire-resisting, but incombustible as far as possible. All interior walls where possible are of brick and a minimum of hollow tile partitions has been used. All plastering is directly on brick or hollow tile.

It is time now for the reader to make a tour through this remarkable building aided by the illustration, not the least of which are the ground plans made from the architect's drawings. In Plan A we have the layout of the entire property bounded by four streets, and it is seen that the main entrance is through the gateway opposite to the short section of Fifty-third Street running from Cottage Grove Avenue to Drexel Avenue. A block plan of the building only is shown. Plan B of the basement, Plan C of the first floor, Plan D of the second floor, and Plan E of the third floor follow in natural succession. It is not thought necessary to give any more floor plans. But it must be borne in mind that the dormitory section has not yet been erected. The remainder of the building is complete for its purposes without it, because it will not increase the capacity of the building for educational purposes. It will simply be a greater convenience to the students, who are now obliged to live outside of the grounds. The main division wall which bounds the east side of the eastern stairway hall has been temporarily built with hollow tile through to its intersection with the south wall of the middle building. The plans tell their own story without further description.

We approach the grounds from the west on Fifty-third Street and first see only the west wing, shown in Fig. 1, which is devoted solely to administration and instruction other than physical culture and athletics. We enter the campus through the gate (Fig. 2), and, walking to the center, turn to the left and see the entire building from the inside as far as completed (Fig. 3). We then retrace our steps to the concrete walk leading up to the west tower and principal entrance for students (Fig. 4). Fig. 5 is a near view of this entrance, showing in detail the brickwork, steel doors and marquises sheltering them. Figure

6 is a near view showing the south wall of the central or gymnasium section of the building, which is entirely devoted to practical instruction in physical culture. This also shows in detail the method of handling the decorative brickwork and buttress construction of this wall. Having entered at the west entrance and ascended a few steps, we are in the west lobby on the first floor (Frontispiece). The door to the natatorium is on the right and the entrance to the social room is seen through the arch. This shows the general finish of all the halls, all the angles being built of brick and the walls plastered on brick or tile with rough cement. Figure 8 is a general view of the swimming pool when drained off. This occupies part of the basement and first floor. It is entirely lined with tiles or cement and the floors are paved with "non-slip" tiles. The spectators' gallery is on the left. A stairway leads from the swimming pool to the dressing rooms, in which "non-slip" tiles have been used also wherever the stairs are touched by the bathers' feet. We can pass from the west to the east side of the swimming pool through the social room (Fig. 10), which is not yet furnished. It is the general amusement room for the whole institution, though in addition there are several special club rooms for students and professors. This leads us through a lobby (Fig. 12) to the east stairway and east vestibule (Fig. 11). Here again we find some carefully planned ornamental brickwork. This entrance and the connecting stairway will be mainly used after the construction of the dormitory section. We may now retrace our steps westward through the social room to the west wing,

passing the drinking fountain at an angle in the hallway shown in Figure 14, and turning to the left we are in the lobby for the General Office (Fig. 13), with the public office on the right and offices and club rooms on the left. South of this there is an additional stairway and an entrance from the grounds at a point nearest to the entrance gate.

On the second floor are the auxiliary gymnasium and handball court, which are not illustrated, also the chapel and lecture room at the south end of the west wing (Fig. 15), which has a special stairway connecting with the entrance last mentioned. On the third floor is the library (Fig. 16) at the south end of the west building, and the great gymnasium, 63 by 94 feet (Fig. 17), occupies the whole width of the main central building and up to the roof over the steel trusses. There are also fourth and fifth stories and some rooms in the towers, still higher, for purposes for which the limits of this article forbid more extended description. When leaving we will retrace our steps to the gateway, and, turning to the north, walk up Drexel Avenue beyond the northwest corner of the grounds, and, turning around, we have the view shown in Figure 18, which takes in the whole range of buildings from the outside. The north front as far as completed covers a length of 180 feet, and exhibits a diversified arrangement of windows and buttresses, each provided to fulfill its own function, but all combined in a picturesque but harmonious group. "But," some will ask, "how about the architecture?" Mr. Hall has left out the architecture and made his building a work of art.

Gothic Architecture and Its Critics

By A. D. F. Hamlin

Part I The Definition of Gothic

DURING the past fifty years the popular appreciation of Gothic architecture among readers of English has been chiefly shaped and directed by less than a dozen critics. Leaving out of account the earlier exponents of medieval architecture enumerated in the preceding article of this series*—Britton, Pugin and Rickman—the list of widely-read and influential Gothicists would include Ruskin, the transcendentalist; Fergusson, the historian of styles; Parker, the popularizer of Gothic details, and Bond and Prior among more recent writers, in England; and Moore, Sturgis and Porter among Americans. To these we must add the Frenchman, Viollet-le-Duc, who not only through translations of his books, but more directly through his monumental *Dictionnaire raisonné de l'architecture française*, profoundly affected the criticism of Gothic architecture in all countries. I leave out of account in this list the distinguished company of French and German, Dutch, Italian and Spanish specialists, who have contributed a large proportion of the scientific literature of the subject, because they are "caviare to the general." The results of their labors have been, in part at least, transmitted to us through the more modern of our English and American writers.

It was not until the second half of the nineteenth century was well along that any real appreciation of the true nature and significance of Gothic architecture became at all general. English writers generally, with the exception of Willis, saw in it little more than a particular set of architectural details associated with a remarkable development of religious buildings. Its dignity, beauty and flexibility were impressive; to copy or imitate its forms would, it was thought, reform modern architecture. Its

history was merely the record of successive modifications of its details, showing evidence of development, culmination and decline; and Rickman's division into the three periods of Early English, Decorated and Perpendicular Gothic, was universally accepted as logical and sufficient. So, indeed, it is, within proper limits, and so is almost any division one may make into periods, within proper limits. But these chronological divisions came to be regarded as so many distinct styles, each with its own complete set of forms, its own arches, moldings, traceries, doorways, windows, piers and ornaments, precisely as set forth by Rickman in 1817.

The result of this conception was to start students and critics upon a wholly mistaken track. Attention was concentrated on details and shapes; the source and origin of these forms, the logic of their development and use, the whole inner content and philosophy of the style, were lost sight of. A false and rigid grammar of Gothic forms, almost as precise and formal as the Italian interpretations of the Vitruvian canons of Roman architecture, came into being. The purists allowed only certain moldings to be used with crockets or capitals of a given period, unless the whole design were, indeed, in one of the "transitional" styles which they had to create, to account for what would not allow itself to be crowded into the convenient three pigeon-holes established by Rickman. They failed to understand that the history of medieval architecture is that of a never-ceasing movement: an onward flow like that of a river; a vital history like that of a tree, ever changing through early growth, maturity and decay.

For purposes of convenience the geographer may divide the Hudson River into three or five or twenty

*The Architectural Record, April, 1916.

sections, but he cannot cut up its waters; he cannot hold them fixed in his divisions; he cannot arrest their flow. So for purposes of convenience I can divide the current of Gothic architecture into three divisions; I can specify certain features as conspicuous in each, as the geographer can specify the enviring topography and the shape of the river bed in each section of the Hudson. But these divisions will be arbitrary, made for convenience of discussion and study and corresponding to nothing fundamental in the movement of the architectural current, which flowed on, incessantly changing under the pressure of those ever changing vital forces—social, religious, political, economic—which shaped its early germination, its full flowering and its decline. These period-divisions and style-classifications made to serve our convenience became tyrants to fetter the student and designer. "Those dreary wrestlings with moldings and traceries, which were still insisted on twenty-five years ago, taught us nothing of the true magnificence of Gothic architecture, of its audacity of construction, of the charm of its caprice on the one hand, of its real strength of purpose and stark architectural quality on the other."* The style-periods and period-styles were made the criteria of all Gothic design everywhere, and in so recent a book as Grant Allen's *Belgium, Its Cities*, the author is constantly characterizing the Flemish Gothic by the English terms invented by Rickman, giving the wholly false impression that the two styles developed in precisely the same way.

Edmund Sharpe recognized the inadequacy of Rickman's division and proposed seven periods instead of four.† But the details of the progressive English development refuse to be crowded into those divisions. Moldings and traceries did not always change *pari passu*; constructive advance was not parallel with decorative progress; the developments of one region were often years in advance of those elsewhere: the whole movement of the art was fluid,

here advancing, there retarded, affected by a hundred diverse influences. The periods are convenient and useful only within carefully observed limits; far more rational is the proposal lately made by various English writers and architects to abandon all the old nomenclature and refer to buildings by their dates and by specific characterization and comparison.

II.

An unfortunate result of the early insistence on periods was, as has been already noted, to confirm the habit of regarding architecture as a matter of details. It was upon these that the chief attention was centered, and mainly upon decorative and not structural details. The nature of architecture itself was fundamentally misconceived. "Architecture," says Rickman on the first page of the *Attempt to Discriminate the Styles*, "may be said to treat of the planning and erection of edifices which are composed and embellished after two principal modes; first, the Antique or Grecian; secondly, the English or Gothic." Ruskin's *Seven Lamps* opens with this definition: "Architecture is the art which so disposes and adorns the edifices raised by man for whatsoever uses, that the sight of them contributes to his mental health, power and pleasure;" that is, Ruskin conceived the building as being first erected, and then ornamented. That this was really his idea is shown later on, when he again defines it as the art "which * * * impresses on its" (the building's) "form certain characters venerable or beautiful, but otherwise unnecessary." "If to the stone facing of that bastion be added an unnecessary feature, as a cable molding; that is architecture." "Architecture concerns itself only with those characters of an edifice which are above and beyond its common use." In the Addenda to Lectures I and II delivered at Edinboro' and published in 1854, he observes that "ornamentation is the principal part of architecture." "No person who is not a great sculptor or painter can be an architect. If he is not a sculptor or painter he can only be a *builder*." As late as 1893 William

*Blomfield, "The Mistress Art," p. 192 (London. Edw. Arnold; 1908).

†Edmund Sharpe, "Seven Period of English Architecture" (London, 1851).



FIG. 1. ABBEY OF VÉZELAY, FRANCE, ROMANESQUE FORMS OF GOTHIC BUTTRESS AND TOWER DESIGN.

Morris "stated as an axiom that 'architecture is the art of ornamental building,' 'A true architectural work' he says 'is a building duly provided with all necessary furniture, decorated with all due ornament.' To the men of this school a building without ornament, but perfect in scale and proportion and fitness for its purpose, would hardly have ranked as architecture."*

The conception of architecture as the art which includes planning and construction and decoration all three as means to the end of producing a beautiful building—decoration or ornamentation being the least essential of the three—seems hardly to have entered the minds of either English or American critics until comparatively recent years; earlier, indeed, in America than in England. There is no discussion of planning, certainly none of artistic planning, and but little of construction, in the great majority of English works of the nineteenth century on Gothic architecture. Rickman discusses the period-styles under these heads and in this order: Doors, windows, arches, piers, buttresses, tablets, niches and ornamental arches or panels, ornamental carvings, steeples, battlements, roofs, fronts and porches! Vaulting is not even mentioned, nor plans, nor construction, nor the technique of the masonry. The order of the topics appears to be quite accidental, with no suggestion of logical sequence. The works of the Pugins, father and son, are chiefly occupied with details. Ruskin thought the structural principles of Gothic architecture so simple that a schoolboy could master them in less time than he takes to learn a game, and with less mental effort. Fergusson, who published his *Handbook* in 1857, and his *History of Architecture* some years later, came nearer to grasping the structural significance of Gothic architecture, and was the first English writer to point out clearly the essential continuity of structural development in the Romanesque and Gothic styles. Yet he speaks of the early Gothic period as that "in which pointed architecture was *invented* (p. 524); and later, declares (p. 526) that

*painted glass is really the important formative principle** of Gothic architecture; so much so, that there would be more meaning in the name if it were called 'the *painted glass style*' instead of the pointed style."

At the end of Vol. I Fergusson enumerates and discusses the details of Gothic design. In this discussion he starts with pillars and windows, though their forms were logically evolved as a result of the vaulted construction. Then follows vaulting, then buttresses, and at the end instead of the beginning, a general discussion of Gothic construction.

Moreover the plan of Fergusson's history is destructive of any adequate conception of either the structural or the artistic evolution of Gothic design. Fergusson was an enthusiast on the subject of ethnology. His ethnology was that of the mid-nineteenth century, with divisions of the human races as precise and as neatly ticketed as the Gothic period-styles. That system of ethnology has been largely discredited; but even assuming its premises as correct, Fergusson's conclusions from them are wholly untenable. He divides up the French styles according to the fancied race-predominance in different sections, and discusses each of these as though each race element had its own distinctive architecture. The unity of the church and of its requirements, the wide distribution and influence of the great monastic orders, the wanderings of the guilds of lay-builders, and a score of other influences overriding and crossing these ethnographic divisions, he ignores completely. Even so, he is constantly encountering and noting exceptions to the operation of his supposed ethnographic laws, so that his system breaks down completely. But it suffices to prevent any broad view of the evolution of French medieval architecture as a whole or of the real genesis and relations of the different schools of that architecture.

III.

It was Viollet-le-Duc who first, in his epoch-making *Dictionnaire raisonné de l'architecture française du V^e au XVII^e*

*Quoted from Blomfield, "The Mistress Art," p. 94.

*The italics are ours.

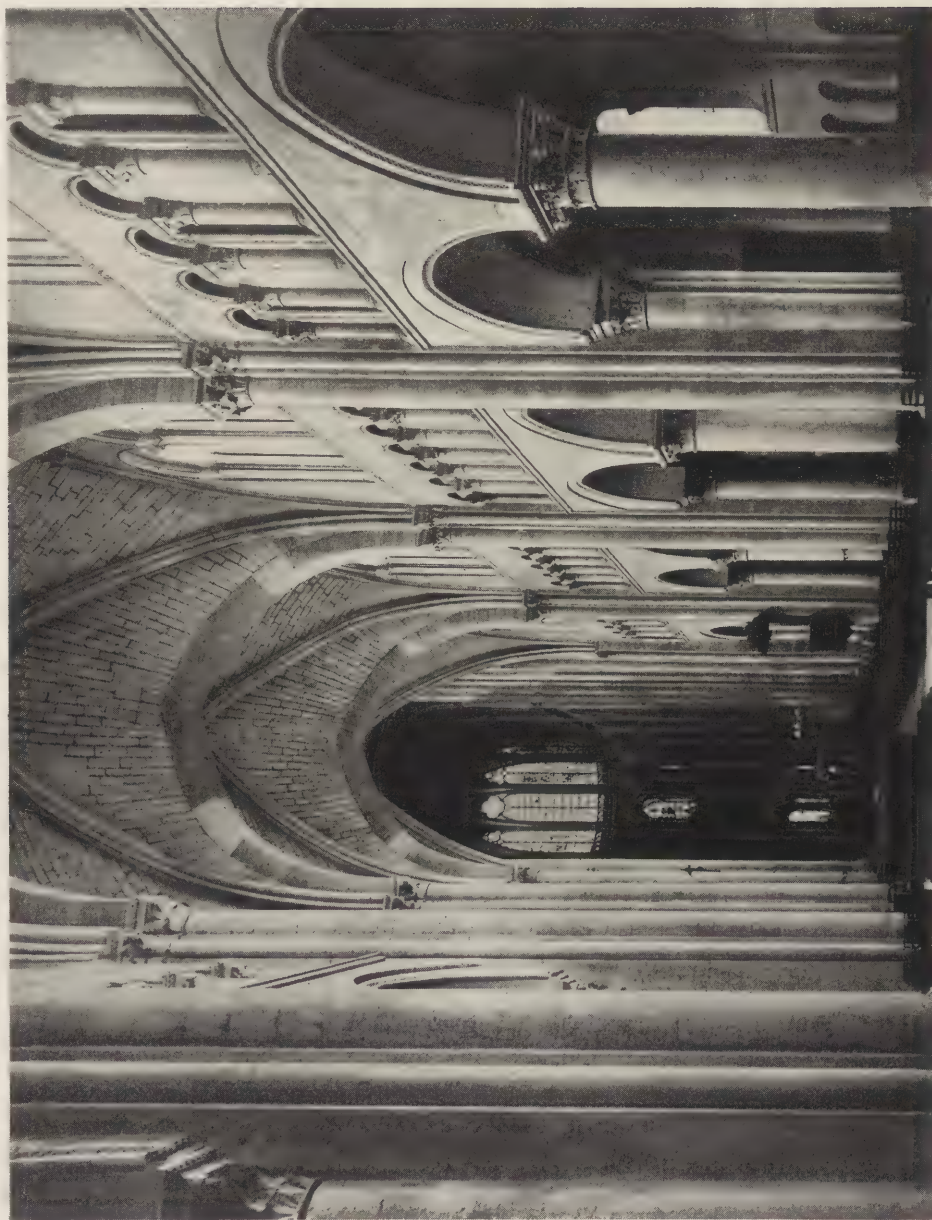


FIG. 2. NAVE OF LE MANS CATHEDRAL, TRANSITIONAL FROM ROMANESQUE TO GOTHIC.

Siècle,* set forth in clear terms and with authority the structural basis of the entire development of the French Gothic styles. This he did with masterly skill in his article *Construction*, which occupies 279 pages, and of which an admirable translation was made twenty years ago by Mr. George Martin Huss and published by Macmillan under the title *Rational Construction*. The same thesis is more briefly set forth in the article *Architecture*; while in that on *Cathédrale* he discusses also those social and political movements which contributed so powerfully to the building of cathedrals in France. All historians and critics of Gothic architecture since 1864 have built more or less upon the foundation which he laid, and we owe him an incalculable debt for having set them on the right path.

It was not, however, until 1889 that any writer in English undertook to embody in permanent form the results of this progress; and it was an American who performed this much needed task. Professor Charles Moore of Harvard in his *Development and Character of Gothic Architecture*† presented an admirable analysis of the structural elements of the French Gothic system, and traced with great skill and clearness the evolution of these elements and of their combination into that remarkable product of scientific reasoning, artistic taste and technical execution, the French Gothic cathedral. He acknowledged frankly his indebtedness to Viollet-le-Duc as the one who first showed that "this architecture consists primarily in a peculiar structural system, * * * and that its distinctive character is that the whole scheme of the building is determined by, and its whole strength is made to reside in, a finely organized and frankly confessed framework rather than in walls." But Professor Moore developed this thesis on independent lines, as the result of personal study of the monuments, and illustrated it with original drawings of great beauty and vigor of delineation. Within the limits suggested by its title this was the clearest, most scientific and accurate work that had appeared in English on its

subject. In spite of certain defects to which I shall later call attention, it has rightly become a classic in its field; and I believe it has had no valid rival until the publication recently of Prof. Frothingham's Volumes III and IV of the Sturgis and Frothingham *History of Architecture*.

Within a few years after Professor Moore's work the late Russell Sturgis published (1896) his *European Architecture*, a somewhat discursive work on European architectural history, in which the Gothic styles were treated with full appreciation of their structural basis, but they, of course, formed only a relatively small part of the work. Since then numerous works have appeared in England touching on Gothic architecture, but the majority are either general histories of architecture like Statham's *A Short Critical History of Architecture* and Simpson's excellent *A History of Architectural Development* in three volumes; or works on the English Gothic alone, like Bond's various works. Prior's *Gothic Architecture in England* and Bond's volumes I shall discuss in a later article.

IV.

What do we mean by Gothic architecture?

One would imagine the answer to this question to be fundamental to any valid discussion of the subject. Now is it not a curious fact that in none of the works cited above, except in Bond's *Gothic Architecture in England*, is there to be found any effort at a clear, scientific succinct definition of the term? What is more singular, Professor Moore, who devotes a whole chapter of his book on Gothic Architecture to the title "Definition of Gothic," fails to provide the definition! On page 18 we read: "The general form and constructive character of a developed Gothic building may be summarized as follows:" but the summary which occupies the next two and a half pages of the book is, of course, not a definition of Gothic architecture, and is intentionally descriptive only of a developed French Gothic building. Having nowhere defined Gothic architecture,

*Paris: 1st edition, 1854-68.

†New York: The Macmillan Company; 2d edition, 1899.

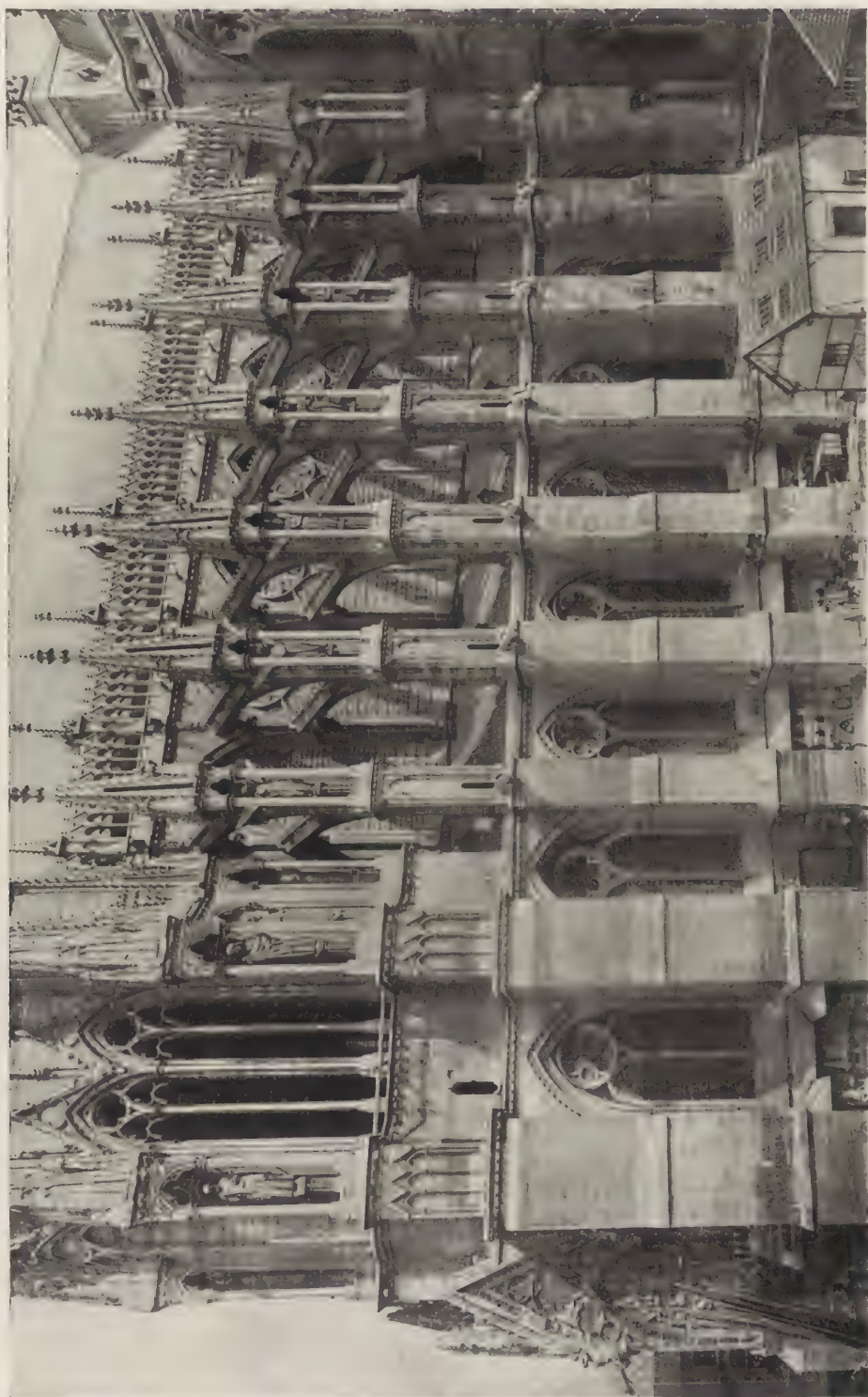


FIG. 3. SOUTH FLANK OF RHEIMS CATHEDRAL.
EXPRESSION OF STRUCTURE IN THE FRENCH GOTHIC.



FIG. 4. GOTHIC ARCHITECTURE IN ENGLAND. NAVE OF EXETER CATHEDRAL, SHOWING MULTIPLE RIBS.

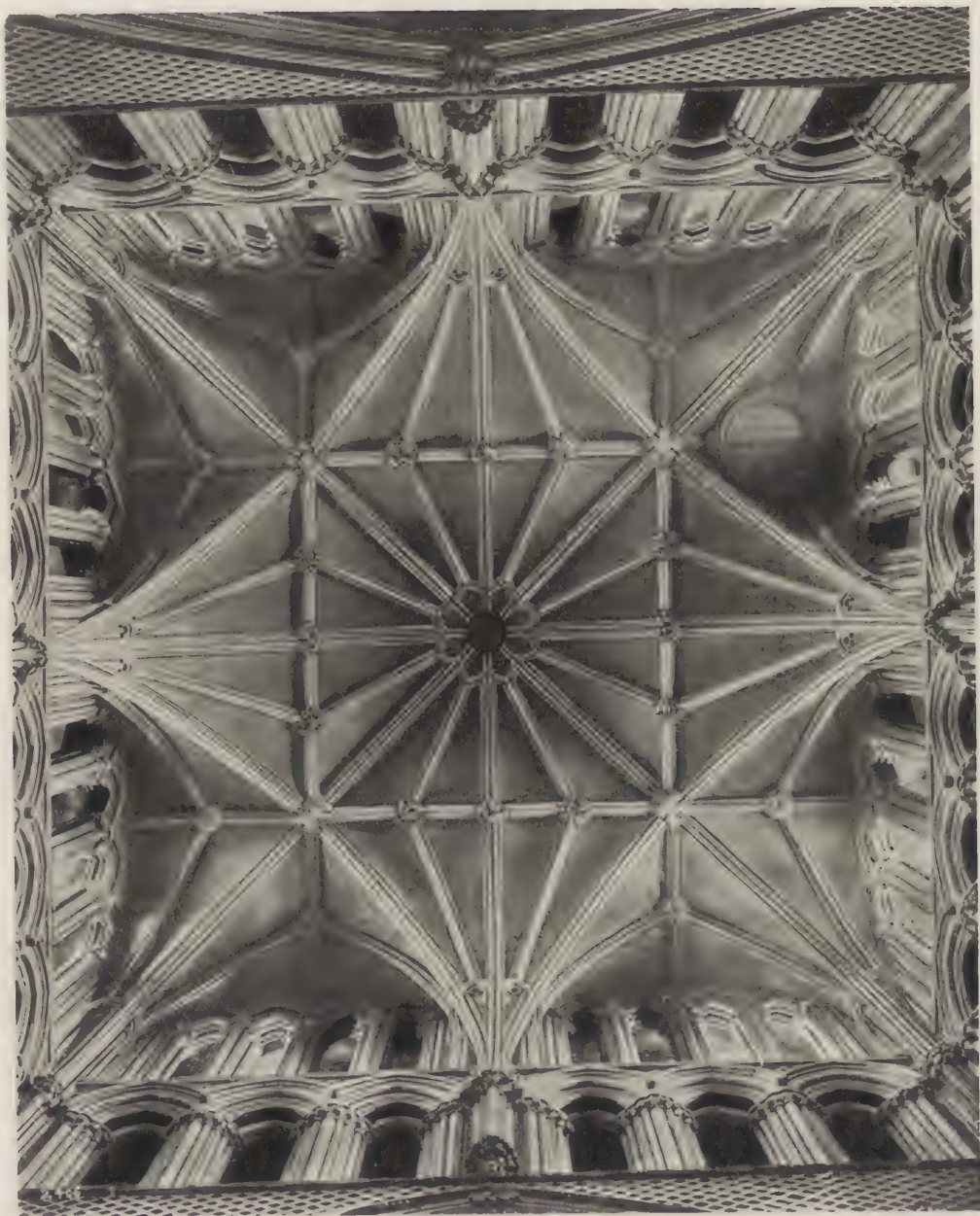


FIG. 5. VAULTED CEILING OF LANTERN,
LINCOLN CATHEDRAL. MULTIPLE RIBS CON-
SISTENTLY APPLYING GOTHIC PRINCIPLES.



FIG. 6. SPANISH GOTHIC INTERIOR.
NAVE OF SALAMANCA CATHEDRAL.

however, Moore leaves us in no doubt as to what he himself means—whatever others may mean—by the term; for him the only “real” Gothic, the only “true” Gothic is that which was developed by the French during the twelfth and thirteenth centuries. Thus in a footnote to p. 19 (2d Ed. 1899) he observes that the English vault-construction with *liernes* and *tiercerons* “was a violation of the principles of true Gothic art.” So on page 204, speaking of the choir of Lincoln, he finds that “the vaulting conoid does not narrow inward in the manner that gives an effective concentration of the vault-thrusts against the pier, as in true Gothic.” The village churches of England are not “monuments of Gothic style.” Professor Moore’s *Mediaeval Church Architecture of England*, a later work, is almost wholly devoted to demonstrating the essentially non-Gothic character of that architecture.

Now Professor Moore has an undoubted right to restrict his own use of the term Gothic to the French developments; and granting this restriction, one may in general follow his reasoning to the end and accept the conclusions to which it brings him. But he must not claim this restriction as other than personal: he has no right to impose it on others. He is dealing with a term which had its origin in popular usage, and which by universal acceptance in half a dozen languages, has been applied to a vast body of medieval architecture. It connotes a movement covering all western Europe through a period of over three and a half centuries. One would suppose that the first effort of the scientific writer would be to seek for those elements, qualities, features and principles which were common to the whole movement, and which would account for the comprehensive use of the term. Professor Moore ignores all these, and denies the valid use of the term Gothic to all developments which did not confine themselves to the methods and principles which dominated the French phase of the movement. He traces its multifarious developments back to the French germ, and makes that germ the definition of the whole. It is as if, beholding a

whole orchard of apple trees sprung from one original tree, he should declare *that* to be the only “true” apple tree and the others all false apple trees. Some of us think the popular judgment nearer right in calling all the fruit of these trees apples, real apples, although many of them, grown from seeds of the original tree falling on other soil and springing up under other conditions, differ in shape and coloring from the original fruit and may indeed be noticeably inferior to it.

Mr. Francis Bond sets otherwise to work, but in a still more curious manner. He seeks to discover at the outset not what are the dominant and pervasive elements of this architecture called Gothic, but what it is that differentiates it from the precedent Romanesque architecture. Now as all the modern critics are agreed that the Gothic grew out of the Romanesque by a gradual process of structural and artistic evolution, Mr. Bond’s procedure seems passing strange. For the germs of nearly all Gothic design are visible in the Romanesque; so that excluding these one by one, and then discovering that the gradually and successively curtailed definitions fail to include many obviously Gothic buildings, Mr. Bond is at last forced to abandon the result of this process and to go back to his starting point. On page 10 of his “English Gothic Architecture”* we read: “English Gothic Architecture is the art of erecting aisled and clearstoried buildings whose vaults have groins or intersecting ribs and whose thrusts are wholly or mainly stopped, directly or indirectly, by buttresses.” But as this fails to include English Gothic buildings without aisles or without clearstories, he curtails the definition, to read: “Gothic architecture” (note the dropping of “English” from the term) “is the art of erecting buildings with vaults whose ribs intersect, and whose thrusts are stopped by buttresses.” But this still fails to cover parish churches, cathedrals and halls with wooden ceilings, e. g., York Minster and Carlisle choir, which, however, have buttresses; hence another curtailing: “Gothic architecture, is the art of erect-

*London, 1905.

ing buttressed buildings." But even this brief and widely inclusive definition does not meet the case of Eleanor's Crosses and of tombs, plainly Gothic, which have no buttresses; while on the other hand it has brought us around in a circle back to Romanesque architecture again—for that architecture produced buttressed buildings! Nay, more: it admits all Roman thermae, the basilica of Constantine, the dome of Hagia Sophia and the domes of nearly all Turkish mosques under its broad mantle, for all these are buttressed. Mr. Bond, it is true, overlooks this absurd result, but in order to bring the Eleanor's Crosses and the tombs under his definition, he abandons the result of his circuitous process, and starts anew. The final definition is in the main excellent, but it might better have been presented at the outset, as the direct result of primary observation: "Gothic architecture is the art of erecting buildings whose vaults possess intersecting ribs and the thrusts of whose vaults are *wholly or largely, directly or indirectly*, stopped by buttresses; and also of doing work *which possesses the chief characteristics of buildings so constructed*" (the italics are ours).

This is, in the main, first-rate. But reasonable as it appears at first sight, by whatever process attained, it is mistaken in confining the term to "the art of erecting" such buildings as are referred to, for this excludes the buildings themselves. The art of building them is Gothic architecture, but not the products of this art! Amiens and Westminster Abbey are not Gothic architecture! This is to construe Mr. Bond's language very strictly, but a scientific definition must be capable of strict construction.

Mr. Russell Sturgis, in his excellent *Dictionary of Architecture** under the title "Gothic Architecture," proceeds very directly to his definition. In part this reads: "That which originated in North Central France about the middle of the twelfth century, and which at the close of that century had spread over what is now Northern France, while detached buildings in England, in Northern Spain, and on the Rhine were beginning to show its

influence. * * * The style which may be properly called Gothic continued to prevail in France until 1500, in Germany and in Spain nearly as long, and in England until even a later date. France was always its chief centre, the architecture of no other country equaling it in dignity or beauty, in perfectly rational and logical working out of its principles, or in beauty of sculptured detail. * * * In England the style was developed in a peculiar way, with strong national characteristics, on a smaller scale * * * and yet in a peculiar way attractive."

Mr. Sturgis has thus correctly defined the term "Gothic architecture" by its historical and geographic content, recognizing the full extent of its application in ordinary usage. He does not in this definition set forth its principles; these are discussed in the analytical and historical exposition which follows in the article from which I have quoted. Is it not, however, possible to combine the historico-geographical with the analytical elements, and thus produce a definition which shall include all that is commonly understood by the term Gothic, and at the same time specify the characteristics which distinguish it from all that is non-Gothic? For surely a definition is not complete that fails to exclude what does not belong under the term defined, even though it include all that does.

V.

May I now venture to add my contribution to these various efforts to define Gothic architecture? I submit this contribution in all humility for the reader's consideration and criticism; he may discover a better answer of his own.

The term "Gothic" as applied to architecture designates *that group of styles which grew up in Western and Northern Europe in the Middle Ages, starting with germinant principles and features already existing in Romanesque architecture, and developing these along various lines in the effort to solve the problem of the construction and adornment of the cruciform church with aisles, wholly vaulted with stone.*

So far the *definition*; which recognizes the fact of the variety of developments

*New York: The Macmillan Company, 1902.



FIG. 7. AN EXAMPLE OF GERMAN SECULAR GOTHIC ARCHITECTURE. INTERIOR OF RATHAUS AT AACHEN.

due to varying conditions and ideals in different countries and periods, gathers them, in accordance with universal usage, into the Gothic fold, in so far as, and because, they sprang alike from the germs which came to life in the preceding Romanesque architecture, and were all dominated by the great problem of the stone-vaulted church with aisles and transepts, fitted for the ritual of the great Western Christian Church. It does not assert that no building is Gothic which is not a stone-vaulted church with aisles and transepts; nor that the various styles or developments in different lands and periods, in order to claim the right to be called Gothic, must show a like persistent logical fidelity throughout their history to the germinant principles from which they all had their first life; or must conform in the manner and logic of their development to the manner and logic of the French Gothic, even though that be conceded to be the parent style. All these styles may rightly be grouped as Gothic, under this definition, because they trace back to a common origin, were occupied with the same fundamental problem, in the service of the same Catholic Church, for a uniform ritual and discipline, and employed to a very wide extent, many of the same characteristic forms and details.

Now this architecture, though primarily and chiefly and most impressively an ecclesiastical architecture, was nevertheless made to serve the secular as well as the religious needs of the community, and to employ, where need was, other materials than cut stone. We may therefore rightly include under its popular name, in accordance with the common usage, such diverse buildings as the brick churches of North Germany, Westminster Hall with its "open timber" roof, and the cloth-halls and town halls of Belgium—many of them, alas, mere heaps of ruins today.

But such a definition is in itself meagre enough, and demands supplementing by some sort of descriptive characterization. In Professor Moore's summary on pages 18 to 21 of his *Development of Gothic Architecture*, five features are enumerated. It can be easily seen that they are

based on Amiens Cathedral as the type, and so framed as to exclude many buildings which lack one or another of these characteristics. They are: (1) the typical French plan, with ambulatory and apsidal chapels; (2) four-part vaults with only the three sets of ribs—transverse, longitudinal and groin (a note explicitly excludes all English multiple-rib vaulting as a "violation of the principles of true Gothic art"); (3) clustered shafts to sustain these ribs and a wall-buttress rising through the triforium to form an exterior feature of the clearstory; (4) flying buttresses; (5) suppression of walls.

No criticism or objection can be raised against the characterization of which the above is but an epitome, as *applied to developed French Gothic architecture*. But it is wholly misleading when asserted as a criterion of all "true" Gothic architecture. Professor Moore's reasoning appears to be this: Gothic architecture had its birth and earliest development in France. The French developed it along structural lines with a rigid scientific logic not matched elsewhere. Its highest development in France is unequaled elsewhere. The foreign developments did not conform to the French logic. They abandoned some of the French principles, and used forms primarily derived from France otherwise than the French. Hence the French is the only true Gothic. The French is the only "true" Gothic because it is the only true Gothic! Now it is perfectly competent to defend the thesis that the French is the highest development among the Gothic styles; that it is the most rigidly logical in its construction; that its monuments are the noblest produced by the whole Gothic movement. But to call other styles "false," bastard, non-Gothic, because they followed other lines toward other ideals is not legitimate criticism. It completely ignores the impressive fact of the great unities, the commanding resemblances, of all the styles we commonly call Gothic; all the elements that are common to the various phases of that marvelous building activity which from 1160 to 1500 covered Western Europe with superb churches, chapels, halls, hospitals, towers and municipal buildings



FIG. 8. THE GOTHIC STYLE IN ITALY.
NAVE OF CATHEDRAL OF FLORENCE.

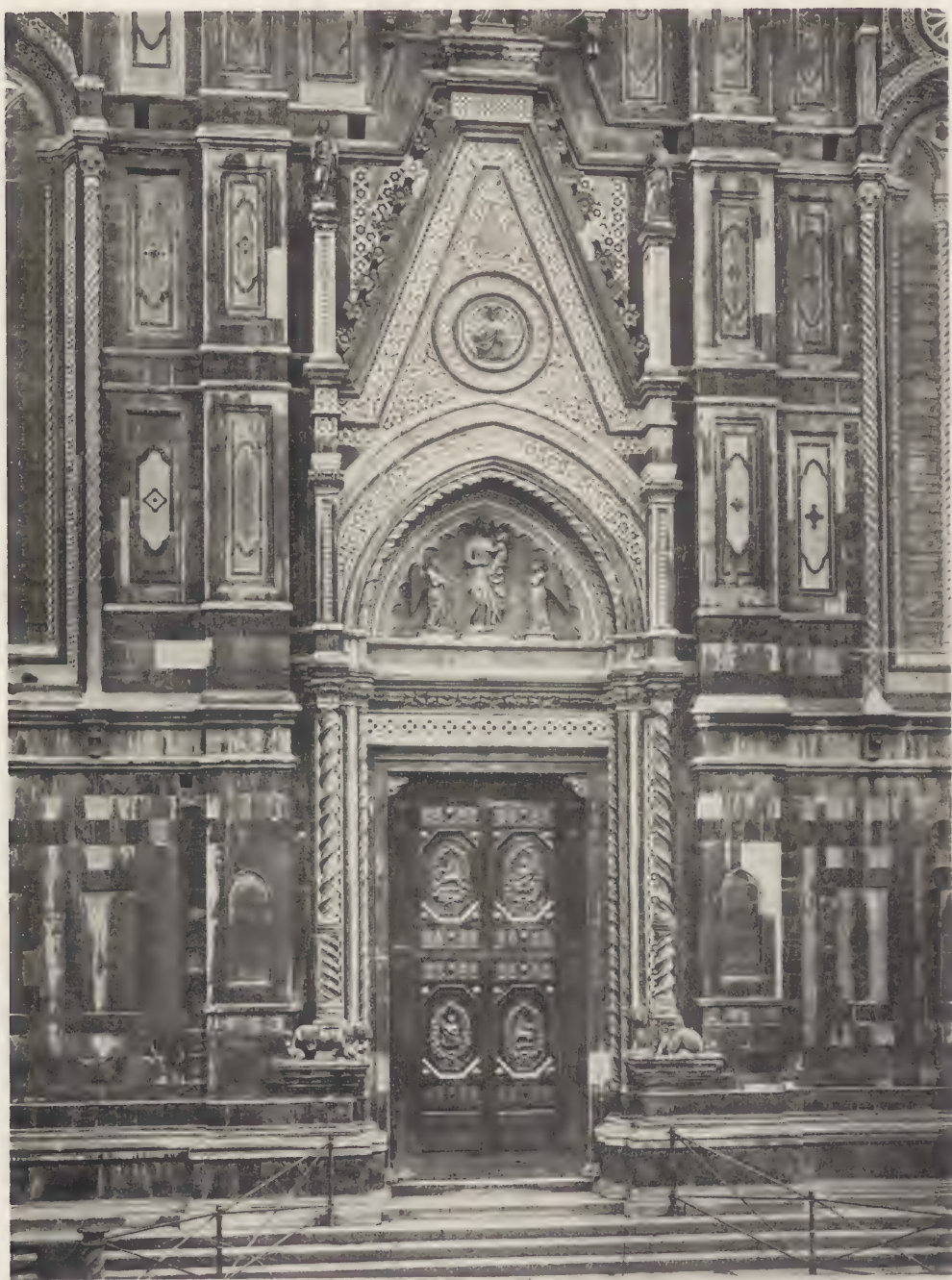


FIG. 9. "GOTHIC" DECORATION IN ITALY.
DETAIL FROM CATHEDRAL OF FLORENCE.

which are among its most priceless possessions. And it rests upon the singularly narrow assumption that logic alone, and structural logic alone, and the French conception of structural logic alone, is the one only permissible principle of progress and development. The relations of structural logic to esthetic logic, imagination and the decorative instinct, which Professor Moore seems to pass over, I shall consider in another paper.

V.

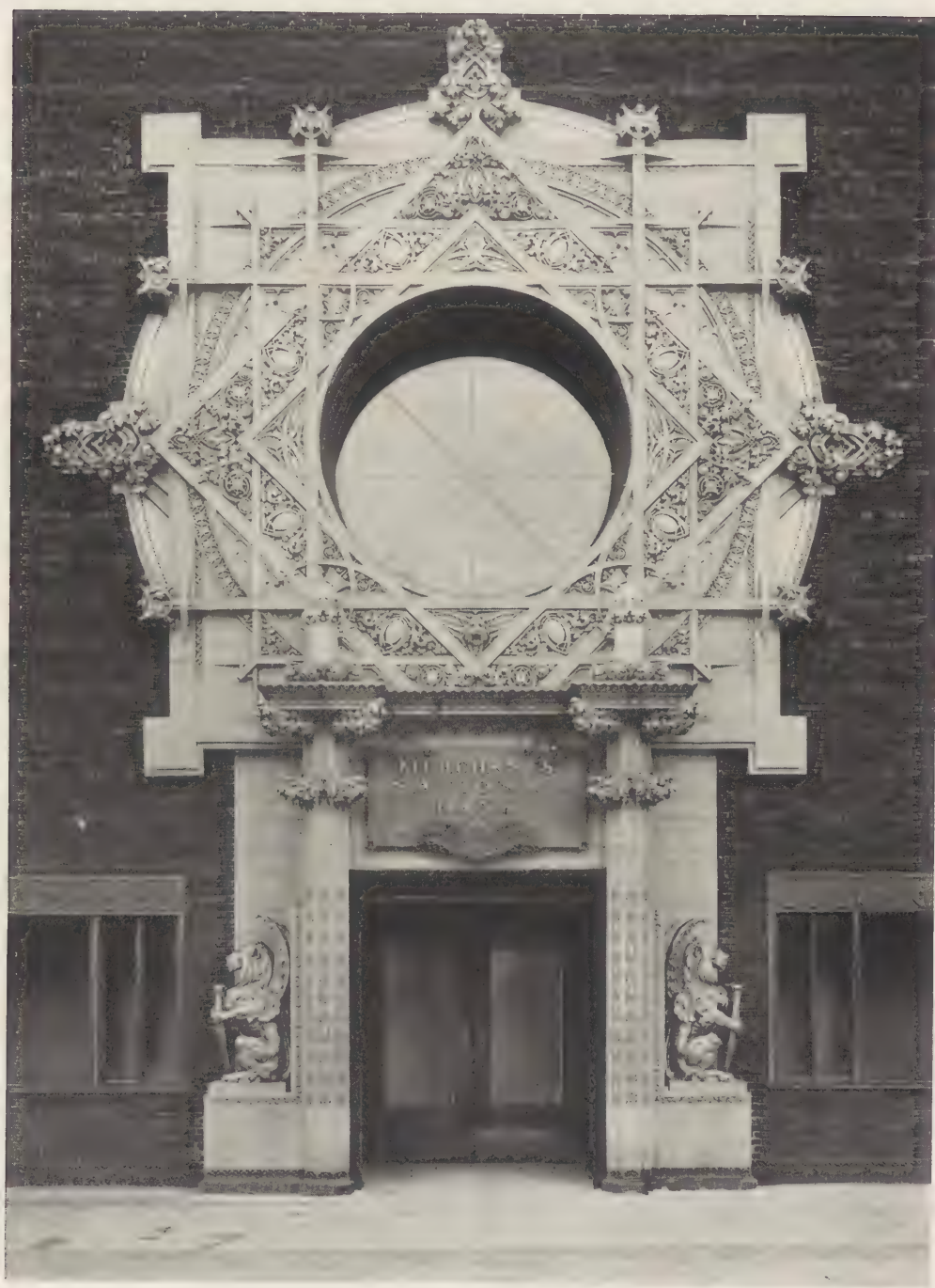
May I now attempt the characterization of the Gothic styles which should supplement the definition I have given?

The styles called Gothic, springing from a common source in Romanesque architecture, and developing throughout western Europe on differing lines, are in general characterized by the following features, although not all of these will be found in all examples:

Ribbed vaulting; pointed arches; the flying arch and pinnacled buttress; clustered shafting; traceried windows in all but the earliest phases; stained glass; a progressive tendency towards loftiness, lightness of supports and suppression of wall surfaces; a system of decoration of which one element was the emphasis and adornment of structural features, and another the use of sculpture and carving of human, animal, vegetable and grotesque forms, controlled by a definite didactic purpose and significance; and finally the use of available materials according to their nature upon principles in part of structural logic and in part of decorative effect.

Not all these features and characteristics are found in all Gothic buildings, nor did all of them develop together at the outset. The different styles vary in the dominance of structural, esthetic, decorative and ritual considerations. It was the French who, on the whole, developed with the most perfect balance and symmetry, the greater part of these features and characteristics; but other schools, following other lines, toward other ideals and under other conditions, also produced architectural styles and works of extraordinary beauty and dignity in which these features and characteristics appear in varying degree and with varying approaches to perfection, as unifying elements in the great and varied movement which the world persists in calling by the name Gothic.

NOTE: Since this article was set in type, the Cambridge University Press has published an important work by Sir Thomas G. Jackson, R.A., F.S.A., on *Gothic Architecture in France, England and Italy*, in which the first chapter is devoted to the definition of Gothic. Here, as in Professor Moore's book, there is no attempt at a succinct definition of the style, "which cannot be defined by any of its features;" but it is regarded as an expression of the whole spirit of the Middle Ages, characterized by sound construction, economy (in its broadest sense), and esthetic expression of the construction. The reader is referred to these volumes for a very interesting discussion of the style.



CENTRAL FEATURE, SOUTH FRONT—MER-
CHANTS NATIONAL BANK, GRINNELL,
IOWA. LOUIS H. SULLIVAN, ARCHITECT.

AN ARCHITECTURE OF DEMOCRACY

THREE RECENT EXAMPLES FROM THE
WORK OF LOUIS H. SULLIVAN

BY A. N. REBORI



SO much has already been said and written about the general character of Louis H. Sullivan's practice that any additional remarks on this subject, in order to be of real value, must be derived from a fresh point of view, or else suffer the ignominy of repetition. I will chance monotony, however, by repeating what I believe to be the greatest tribute ever paid a living architect by a critic. The late Montgomery Schuyler has said "a new work by Sullivan is the most interesting event which can happen in the American architectural world to-day," which was indeed a compliment, the utterance of which any one should feel justly proud to have inspired. If there is an occasional dissension from this opinion, it is because the work of this master is not fully understood or its meaning and intent not entirely grasped. I use the word "master" in its fullest sense, for surely there is no denying that none but a master-mind could conceive and execute such work as his, and yet I have heard it said on many occasions that "Sullivan excels in details," and that "his architecture is not so interesting," and further, that "without this fancy detail there would be nothing to it at all," which remarks tend to show a gross ignorance of the fundamental principles that underlie all of Sullivan's architecture.

If we agree that the ornamentation of his buildings is beautiful, we are bound to admit from even the most casual study that it is beautiful, not only as ornament, but by reason of the part it plays in the general scheme of development. It is, to say the least, the true handwriting of the designer expressing itself in his own par-

ticular flourish or grace. The great lesson that Sullivan's work teaches is not one of detail or ornament, but one more comprehensive in which the solution of a particular problem is given artistic and practical expression. It is in his analyses of the conditions at hand and in the straightforward and brilliant manner by which conditions are made to function that the works of this master architect fairly stand out in all their bigness. It is the expression from within outward, or as Sullivan himself so aptly puts it, "mind over matter."

Take for example, any one of his bank buildings, and we are bound to admit that the solution of the problem was the result of a previous knowledge of the conditions involved, combined with inventive imagination and technical and artistic skill of a most unusual order. For the lack of a better word we might term all this "creative genius." Call it what we will, it is architecture.

That there is a formula to which Sullivan adheres in the development of his work is quite apparent; but of one thing we can rest assured, it is not one of duplication, for, with no two problems alike, no two buildings are given the same expression. It is an architecture of pure intent, with form following function as its basic principle. To understand function requires an intimate knowledge of the practical requirements; to express form demands artistic skill combined with an intimate knowledge of structural material. Hence Sullivan arrives at a solution of a given problem by means of a carefully worked-out plan in which the allotted areas arranged as to needs dominate the

treatment, and the outward appearance of the building is permitted to develop accordingly, with the method of construction taking form naturally. But, as all structural conditions are not pleasing to the eye or worthy to be classed as architecture, his artistic instinct causes him to add decoration or adjust propositions, as the case may be, obtaining a justness and balance that is both structural and beautiful.

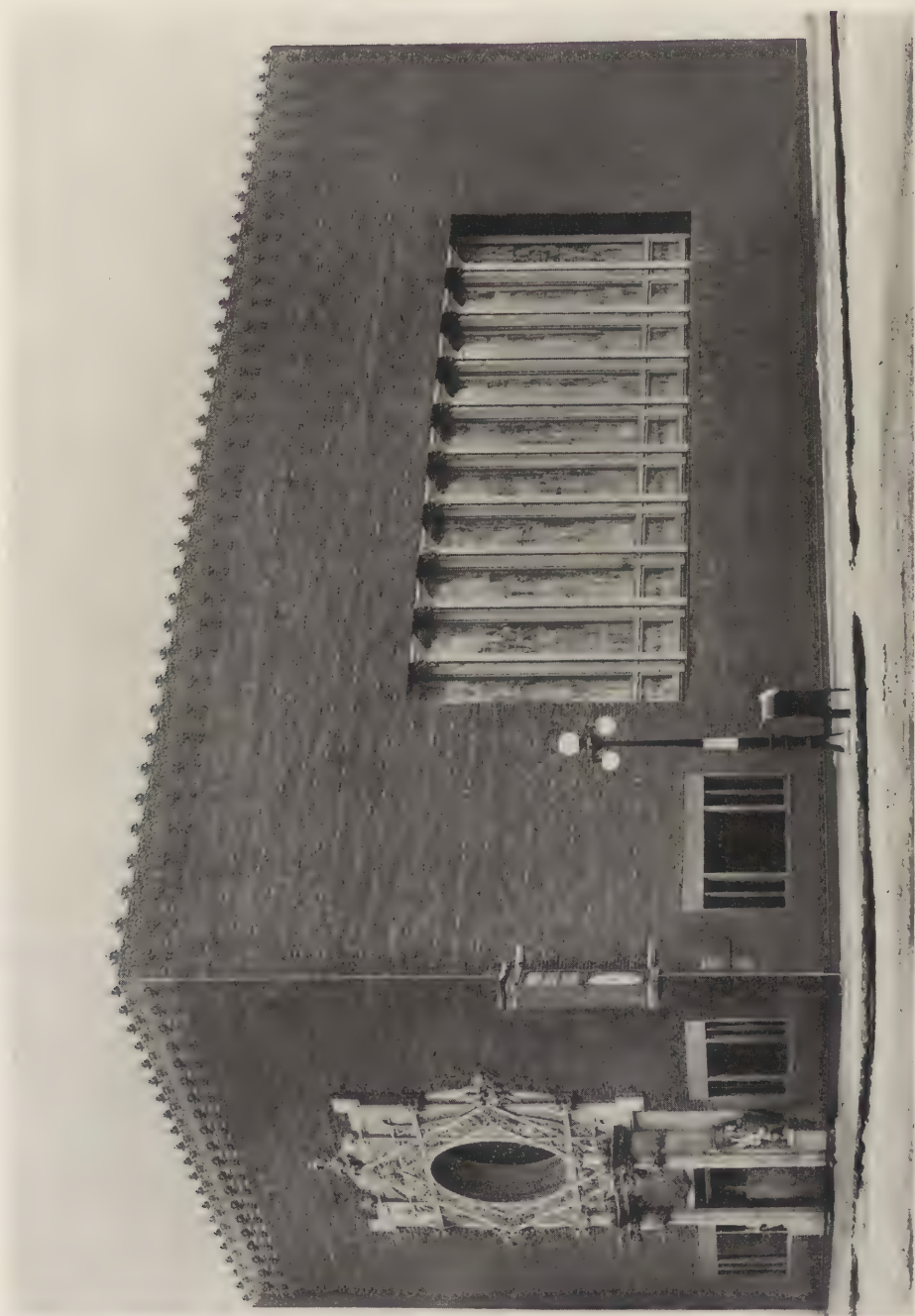
In contrast with this method of work, we have the buildings of the many architects throughout the land, who, by their faithful reproductions of monuments of the old world, not only have been successful professionally, but have achieved a high pinnacle of fame in their own field. Sullivan, at least, stands in a class by himself, for indeed his architecture is not one of imitation, but an architecture that gives a truthful and idealistic modern interpretation of a given problem in a most intimate and individualistic way. It is the true spirit of democracy, expressed in terms of building, significant of our times, our people, and our life. I believe it to be all this, and more, by virtue of the skill displayed by the designer in the artistic spacing of his decoration, in the placing and scale of the detail, and in the study given the design as a whole based on function, logic and art. The problem confronting him in any case is to make the most of the advantages and minimize the disadvantages, and to do so with the least possible sacrifice of the strictly utilitarian purpose of the structure itself, and yet to make as expressive, harmonious and beautiful a building as conditions permit.

In the light of these remarks, it might interest the reader to hear how Sullivan solves a given problem. Of course, there must first be a problem, or rather a client desiring a new building, which is an event unusually scarce at the present time. But in this particular case, the architect was informed by a banker who had seen one of Mr. Sullivan's bank buildings that it was the intention of the committee on building to erect a new bank to house their institution. Being broad-minded and up-to-date business men, strongly in favor of a rational architecture, they in-

vited Sullivan to study their requirements and prepare drawings. Complying with their call he left for the scene of expectations, Grinnell, Iowa, in the central part of the State, personally to interview his prospective clients and look over the original site. After meeting the committee, he set about the customary task of learning the needs of the proposed building, not in a casual way, but in the most detailed manner possible. Judging by the sketches and notes which were made with the aid of an ordinary desk rule on sheets of common yellow paper acquired at a near-by apothecary shop, not a single part of the machinery that was to make up this bank's organization was overlooked. Here we find not only the allotted space to the various departments, but the different desks, cages, and all minor details worked out to an exact scale. For three whole days he talked and drew, rubbing out as changes were made, fitting and adjusting to the satisfaction of all. The dimensions are clearly marked on these original drawings in plan, section and elevation, leaving no doubt as to the exact layout of the building. I asked Mr. Sullivan how it happened that his preliminary sketches were worked out in such a definite manner, and he answered quite simply that "those were the requirements as given, and it only remained to jot them down on paper," which he did, using the sheets of yellow paper available at the time.

These notes or preliminary sketches are the most exquisite bits of architectural memoranda that it has ever been my pleasure to see. In their making, every possible element that was to play a part in the future project was fully analyzed and put into architectural form in plan, section and elevation, and what was more, this was all done in a little office adjoining the bank president's room in the old building at Grinnell, Iowa, in full view of and with the aid of the building committee. Before leaving the place, the owner knew from these sketches exactly what his building was going to look like, from the arrangement of the smallest detail to its largest mass, all of which received his approval.

The development of the sketches into working drawings proceeded in close ac-



GENERAL EXTERIOR VIEW—MERCHANTS
NATIONAL BANK, GRINNELL, IOWA.
LOUIS H. SULLIVAN, ARCHITECT.

cordance with the original scheme, for, having once determined the exact conditions and requirements, there was no further need for change, for the vital organ, the plan, which plays the important role, was determined upon and accepted. Hence, we see how Sullivan arrives in a most intimate manner to a logical expression of the functioning duties of the building itself. All this is done without the aid of that exquisite ornamentation for which there is no formula, but which is the personality of the artist himself, or, as I have previously put it, his handwriting.

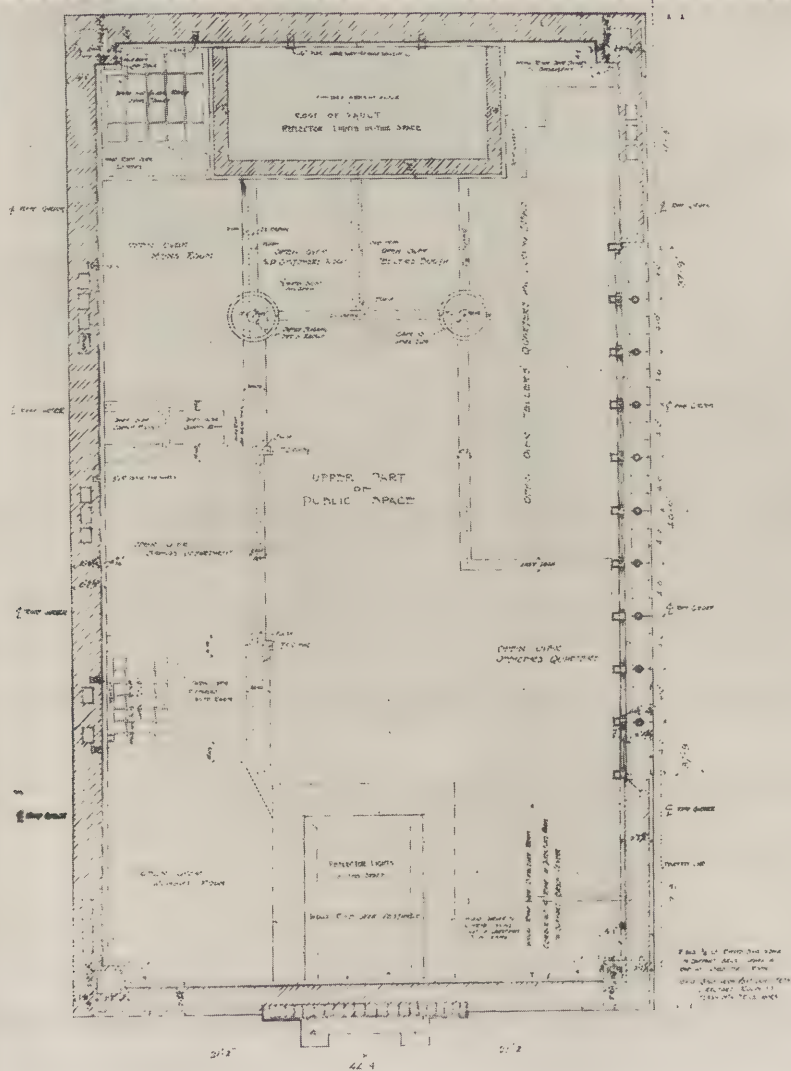
Consequently, by the abandonment of every architectural convention that does not conform in strict loyalty to the problem involved, the simple force of need becomes a principle of beauty. That is why no two buildings from the hand of Sullivan are alike, no more than two persons possess the same physiognomy. Each problem has its own particular solution, derived solely on its merit, and worked out on an intelligence of the highest order, the result of which can bear analysis, and still prove that "form follows functions." It is the organic simplicity of this unified work of Sullivan's that will live long after his ornament has ceased to play so important a part in the minds of its observers.

I am convinced his work possesses style, but that style is a distinctly personal one, emanating from the source, and that source is Sullivan. The remarkable part of it remains in the fact that it is original, and does not bear copying, for to be able to do likewise, or rather to possess the ability to do likewise, would be to do something else, equally as good and just as personal to the individual. Surely it is not given to many of us to be original, and we can all realize that nothing can be more depressing than the undertaking to do something new by an architect who is unaware of what has already been done or who has not learned how to do it. Originality as we often find it is usually a "stunt," or a peculiar twisting, or a disarrangement of accepted form, whereas Sullivan's original designs signify a natural growth, the steady ad-

vancement of which abounds with knowledge and judgment. Chance does not play a part in the solution of a problem controlled by such a mind, and yet it is the imaginative quality so rarely possessed, but in Sullivan's case, so paramount, that makes his buildings great.

The bank building at Newark, Ohio, is quite as different from any other bank building that has preceded it, as it is different from the bank building at Grinnell, Iowa. The fact that one is not like the other clearly shows the designer's intention to treat each problem on its needs, regardless of stereotyped precedent. In the design for the Grinnell building a single story structure is required and frankly expressed, whereas in the case of the building at Newark a two-story structure is demanded and likewise takes proper form. The choice of materials—varying from an entire terra cotta treatment for the façades on the one hand, and a brick and terra cotta treatment on the other—and their varied handling show the versatility of the architect. The same remarks apply to all three buildings herein illustrated, the largest covering a plot of ground forty-three by seventy-five, and the smallest a small corner lot twenty by sixty. None of these buildings compares in magnitude with Sullivan's greatest bank at Owatonna, Minn., yet they are all strikingly successful, each in its own characteristic way.

The Merchants National Bank at Grinnell, Iowa, presents a brilliant, dignified exterior, with its entrance motif of delicately modeled lace-like design clearly cut and imbedded against a background of rich toned brickwork as the dominant feature of its design. The side is simplicity itself in the form of a flat wall treatment with a single principal window of leaded glass preceded by a closely spaced colonnade possessing exquisitely ornamented spreading capitals within the face of the enclosing brick frame. Besides the principal features of the façade are to be found the windows to the directors' and women's room discreetly and frankly placed in a manner evidently not intended to play an important part in the general composition. The crowning feature consists of a rich orna-



PLAN AT UPPER LEVEL OF BANKING ROOM
—MERCHANTS NATIONAL BANK, GRINNELL,
IOWA. LOUIS H. SULLIVAN, ARCHITECT.



GENERAL INTERIOR VIEW LOOKING TOWARD VAULTS—MERCHANTS NATIONAL BANK,
GRINNELL, IOWA.
Louis H. Sullivan, Architect.



INTERIOR VIEW, SHOWING OFFICERS' QUARTERS AND PRESIDENT'S ROOM.
Louis H. Sullivan, Architect.



VIEW OF INTERIOR SHOWING TELLERS' QUARTERS—MERCHANTS NATIONAL BANK, GRINNELL, IOWA. LOUIS H. SULLIVAN, ARCHITECT.



MEN'S (CUSTOMERS') ROOM—MER-
CHANTS NATIONAL BANK, GRINNELL,
IOWA. LOUIS H. SULLIVAN, ARCHITECT.



DETAIL OF CHECK DESK—MERCHANTS
NATIONAL BANK, GRINNELL, IOWA.
LOUIS H. SULLIVAN, ARCHITECT.



CROWNING DETAIL OF VAULT—MER-
CHANTS NATIONAL BANK, GRINNELL,
IOWA. LOUIS H. SULLIVAN, ARCHITECT.

mented terra cotta coping slightly silhouetted against the sky. The exterior brickwork is of wire-cut shale brick of mixed shades, ranging in color from blue-black to golden-red and laid with raked joints. The crown effect is of brown terra cotta with gold inlaid, and the griffins or lions on the flank of the entrance are of fire gilt terra cotta. Over the door, marked in lettering which is in keeping with the character of the ornament, is a statuary bronze sign or name-plate.

The slender metal columns with spreading caps supported on a solid brick wall high above the sidewalk, on the east front, are covered with gold leaf which sparkles in the sun, adding unusual charm and brightness to the exterior. Separated from the leaded glass by a three-inch air space, hermetically sealed, is a thickness of polished plate glass, on the outside face. The effect is that of a dream-like futuristic picture, mysterious but superb in color. At the corner, protruding like a sore thumb, is the "old clock," a relic of the bank's former home.

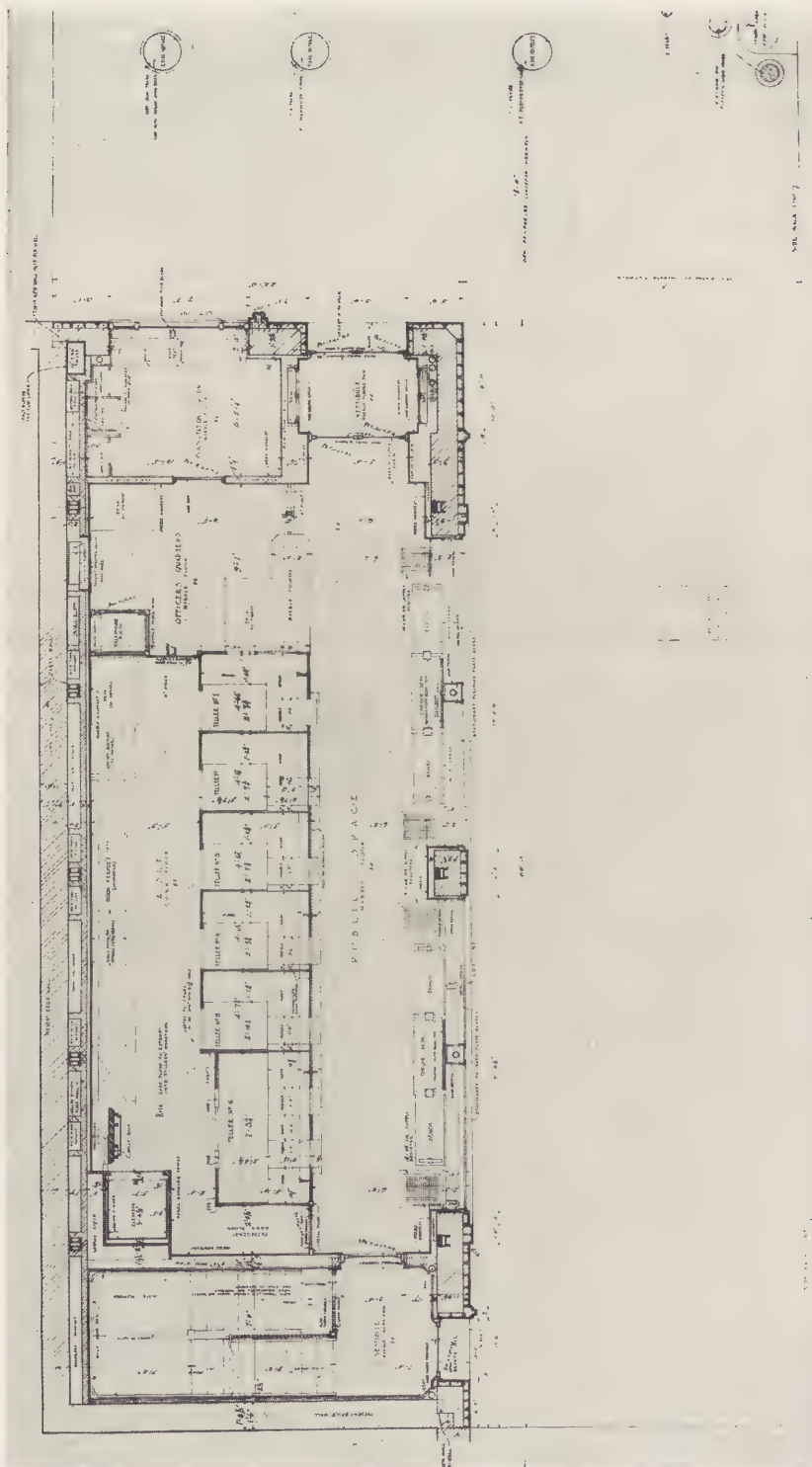
If the exterior frankly proclaims the plan, it is to the interior that we must turn to see the plan in working order. And yet here again the same consistency in design is found followed out in every department. The direct and simple treatment of the front, depending largely on its color scheme for interest, truthfully corresponds to the interior forms or plan. The same thoughtful consideration is everywhere apparent. From the moment the visitor enters past the vestibuled doors the workings of the bank are thrown open to view, disclosing at first sight the intricate mechanism of the open doors to the steel-lined vaults on the central axis. Then comes to view on the right and left the glass, brick and bronze partition screens that divide the space around the central public lobby. It is like the open works of a watch as seen through its crystal back cover.

At the street corner of the plan is conveniently placed the combination directors' and consultation room within easy access for the public, and with a wide opening provided with a concealed side coiling wood shutter adjoining the officers' quarters. This shutter is used

only during directors' meetings. A brick and marble counter separates in a most informal manner the office space from the public. The tellers' and bookkeepers' space, with their dividing cages of straightforward material, completes the arrangement of the right side of the plan, while on the left, fully equipped with up-to-date features, are placed a women's room, savings department and men's room in the order named. Between these two divisions is placed a vault at the rear of the building, two stories in height, with an elevator serving the main floor level and the basement providing the only ingress for the lower level of the vault.

The interior fittings are housed in a single lofty room, limited only in size by the outside walls and roof of the building. In general, the interior decoration is confined to a carefully studied series of units composed of the material employed, and paneled off in a decisive manner from the simple skylighted glass and wood paneled ceiling to the side walls of plaster, marble and brickwork. The principal flood of natural light is admitted through the large opalescent east window, so admirably marked on the outside of the building, and is augmented by the central skylight, which throws a soft, diffused blanket of light that covers every portion of the room and gives a strong decorative treatment to the otherwise simple ceiling. The circular port window over the entrance adds a note of brilliantly harmonious colors by its leaded glass design that lends to the effectiveness of the otherwise flat high wall, of which it is the radiating note. Contrasted with this brilliant symphony of color, which is decidedly meant to be the high pitch of this dignified and orderly interior, is the rest of the glass work, which takes on a mottled soft colored flat tone of vibrating transparency. A recall of the high-key color work in an unusual but successful manner is found in the treatment of the interior clock, which is set in a glass mosaic field flatly imbedded in the brickwork over the vestibule feature.

Bright accents of color are added in the way of leaded glass inserts to the delicately carved oak framed electroliers, desk lamps, and the leaded glass panels



PLAN OF FIRST FLOOR—THE HOME BUILD-
ING ASSOCIATION COMPANY, NEWARK,
OHIO. LOUIS H. SULLIVAN, ARCHITECT.



GENERAL EXTERIOR VIEW—THE HOME BUILD-
ING ASSOCIATION COMPANY, NEWARK,
OHIO. LOUIS H. SULLIVAN, ARCHITECT.



EAST FRONT—THE HOME BUILDING AS-
SOCIATION COMPANY, NEWARK, OHIO.
LOUIS H. SULLIVAN, ARCHITECT.

of the large east window. These spots add color value to the entire scheme and help liven up the flat faced walls. Comparatively dark finished quartered oak frames enclose large plaster ceiling panels painted a lighter shade. The floor is of gray pink Tennessee marble in oblong shapes and laid with hair joint. The assorted, thin, Roman shape brick for inside brickwork are carried to a height of 13 feet around the walls and are capped above the vault doors by a richly designed and executed topping or crown of fire gilt terra cotta. In elegant contrast with the direct brick treatment are the counter tops of Vermont verde-antique marble in flat slabs of almost three inches thick. They project slightly at the statutory bronze wickets where the projecting marble deal plate is of a grand antique marble a shade richer in color. The woodwork throughout is of quartered oak, stained to a hickory shade, with the grain in every case effectively permitted to add to the decorativeness of the interior. Mouldings are tabooed in the handling of all woodwork.

Wherever wood carving is indulged in, it adds a distinct charm, because it is well done, and it gives a greater appreciation of the wood. Some of this carving appears on the upright parts of the check desk, and again at the spandrels above the doors. It is decidedly of a wood character and sets off and enhances the beauty of an otherwise flat and direct wood treatment. Wherever the various materials are used there is no sham on the part of the designer, nor is there any doubt on the part of the observer as to what the various materials represent. Wood is made to look like wood, and likewise all the other materials are honestly given expression. What is more remarkable is that these simple expressions are given an interpretation that is at once intelligent and beautiful. Surely we find no instance where the problem is shirked or covered up by an incumbent disguise of something that it is not. Here without doubt is seen the hand of a master craftsman with something to say, and that something presented in a most plausible manner. The result is not the same old story over and over again, but an

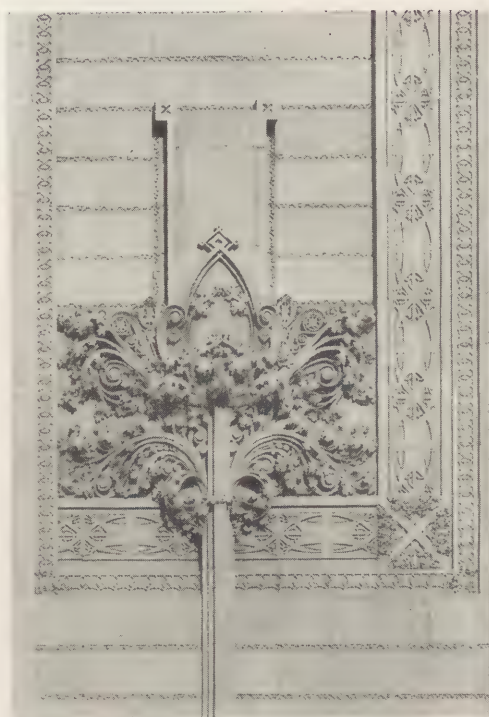
architectural treatment that is as pliable to the mind of Sullivan as the conditions leading up to the solution of a problem permit.

Thus we see in the little bank building for the Home Building Association Company at Newark, Ohio, another solution and expression of an architectural work that is as different both in general composition and detail from the Grinnell Bank, which I have just described, as the requirements of the latter problem differed from the requirements of the first. In the latter we find a condition which frankly required a one-story treatment, whereas in the Newark building it is just as obvious from the treatment of its design that the structure is of two stories. And yet what a temptation it would be to almost any other architect to string a row of classic columns under a generous cornice across the façade of both these buildings! But this article has not to do with classic architecture, nor is it my intention to compare Sullivan's works with those of other architects. I merely digress at this point to bring home the vital force and fundamental truths of the architecture now under consideration.

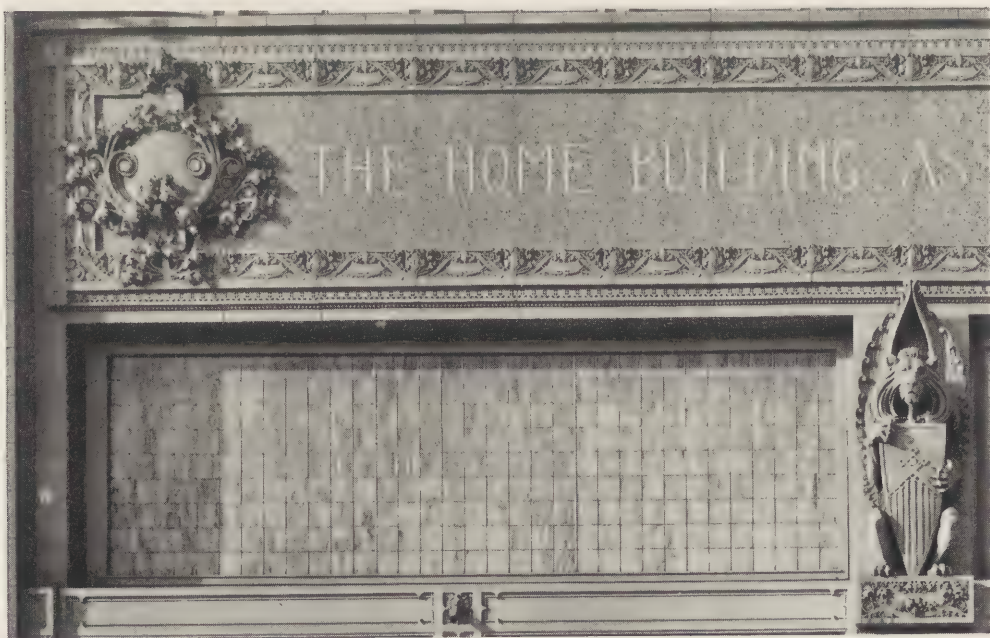
To return to the subject of the building in Newark, it is plain that both the first and second story plans are the natural outcome of a carefully studied set of requirements to be taken care of on a corner plot of ground of small dimensions. In this case a two story building was essential, hence its designer takes advantage of the imposed requirements by placing the various offices of the business organization on the second story, occupying the ground floor with tellers' and officers' quarters, within the easiest possible access for the transient trade or public. The main entrance is on the short side of the lot, while the entrance to the upper story is purposely placed at the opposite end of the long side. The window openings throughout are placed and arranged with a daring adherence to the strictly utilitarian purpose of the structure itself that speaks highly of a competence that is born of understanding. These windows are spaced broad and low, as they should be, where light is essential and conditions permit.

Once again, if the plan is as clearly expressed as it is intelligent, it is to the elevations that we must turn in order to grasp the simple force of this direct bit of planning, for here we see how by the skill of the architect, in his emphasis and his subordination in the artistic spacing of his decoration, in the placing and scale of his detail and study given to his design as a whole, based on function, reason and logic, the result is made highly artistic and effective. The designer once more made the most of the advantages presented by the plan, and correspondingly minimized the disadvantages, and yet he has accomplished this without the least sacrifice of the strictly utilitarian purpose of the structure.

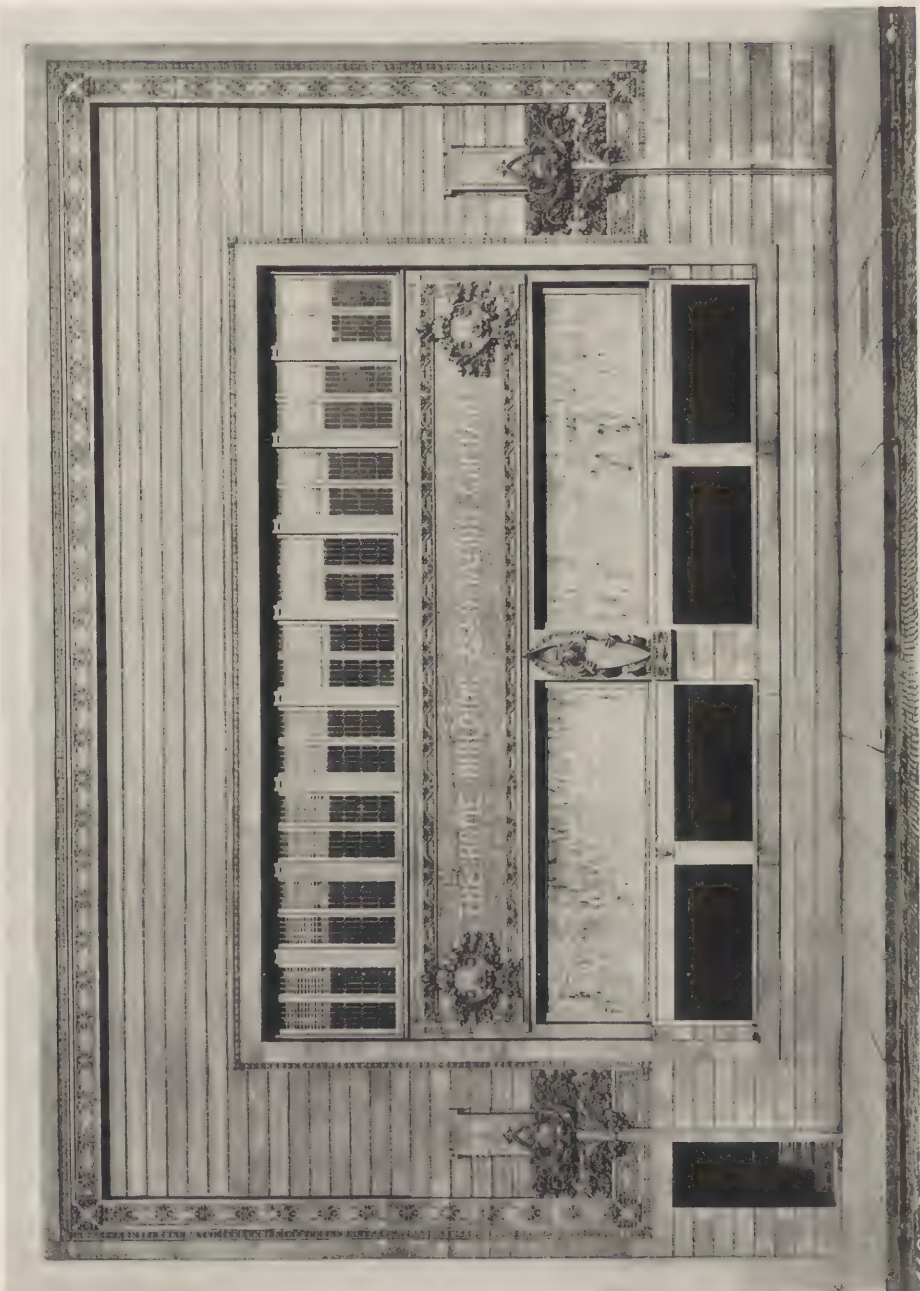
Thus the effect attained is an expressive, harmonious and beautiful building, based on fact artistically enforced. For example, Mr. Sullivan does not hesitate to subordinate the side entrance in its relation to the general façade. As a matter of fact, he frankly treats it to a consideration of secondary importance by flanking its right side only with the stem of the delicate burst of floral ornament, which blossoms above and



DETAIL SOUTH FRONT—THE HOME BUILDING
ASSOCIATION COMPANY, NEWARK, OHIO.
Louis H. Sullivan, Architect.



DETAIL OF GLASS MOSAIC PANEL, SOUTH FRONT—THE HOME BUILDING ASSOCIATION
COMPANY, NEWARK, OHIO.
Louis H. Sullivan, Architect.



SOUTH FRONT—THE HOME BUILDING
ASSOCIATION COMPANY, NEWARK, OHIO.
LOUIS H. SULLIVAN, ARCHITECT.

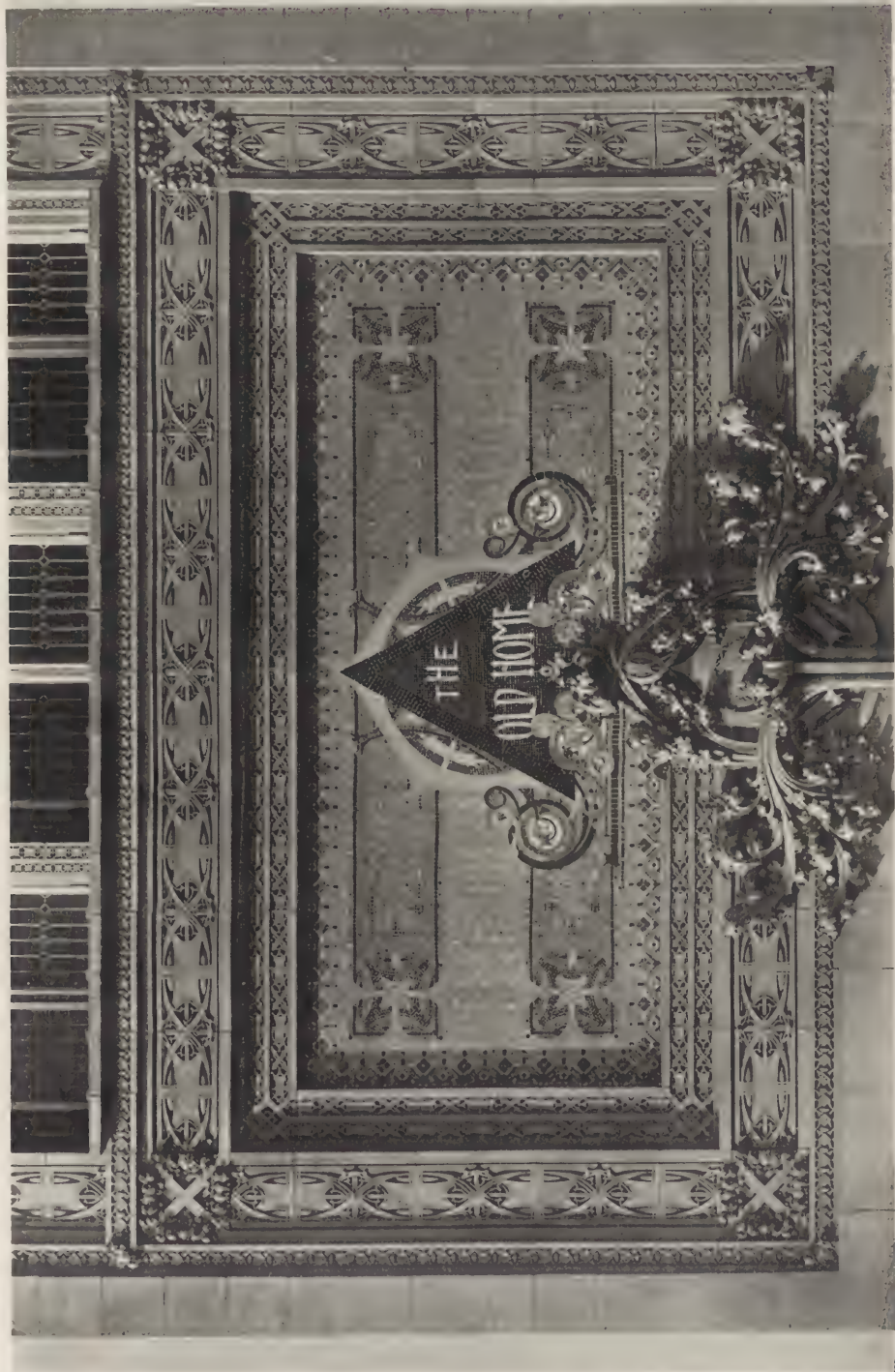
which is repeated on the opposite of the large frame enclosing the side window openings of the two floors. I asked Mr. Sullivan why he placed these efflorescent spots as he did, and he answered simply that "it was done to take the eye away from the side opening so that the front entrance would dominate and clearly mark the public entrance to the building."

The exterior is treated in carefully arrayed panels of soft greenish gray terracotta, with ornamented sand-finished borders, leaded glass windows and inlaid glass mosaic, rich and mellow, of a soft mottled shade, with the front panel more strongly emphasized by its gold lettering in a field of green shaded glass. The contrast between the gray colored terracotta and the exquisitely tinted glass mosaic work gives the exterior of this little building a richness and charm that is at once distinctive without being overdone. I will not attempt to analyze the character of the exterior ornamental detail, for that would really be attempting too much, especially when there is no other age, style or period with which it can be compared, as far as its relation to that particular style or period is concerned. It is distinctively of today, and is characteristically Sullivan, and all his name implies. Its very freedom breathes a joyous spirit of renaissance, of true democracy. Further than this, I do not care to go for fear of detracting from the vital importance of Sullivan's work, which is, as previously stated at the beginning of this article, an architecture of organic significance, in which the force of need is the underlying principle from which it is evolved. The interior of "The Old Home," as the Newark building is called, is as successfully handled in all its minutest details as the exterior. The general view gives a fair idea of the decorative scheme. Although the ghost-like reflections on the polished marble facing and plate glass screen tend to distort and make flimsy the solidity of the walls, this effect does not appear in reality. Color is extensively used throughout from the rare antique marble floor carried around the counter and side walls below to the rich polychromatic frieze of conventionalized design, and the richly paneled deco-

orative ceiling above. For the teller's screen a simple and effective arrangement of bronze grilles on plate glass supporting a continuous bronze light reflector is made to suffice. The wood work is mahogany, with doors of a single flat panel of carefully selected grain African mahogany veneer from Togas Island, off the west coast of Africa.

Judging solely from the illustrations herein shown, one is apt to get the impression that the interior color scheme is rather loud. This is not the case, however, for in reality the decorative work is harmoniously blended, rich and effective, and well united and held in place. Its one fault is that it runs the risk of becoming unrestful because of its exuberance. Taking this building as a whole, both in its exterior and interior treatment, it is as successful as it is refreshing. In its scope, the design of this building shows a remarkable diversification, and considering that the practical considerations were admirably taken care of and not slighted in the least, what the designer has accomplished aside from its artistic quality is very impressive. It argues not merely an unremitting application, but the establishment of a very clean cut and effective method of work determined by modern construction and uses of the place.

Herein lies the secret of the positiveness of all of Sullivan's buildings. They can stand the most severe analysis from a structural and practical standpoint, and yet reveal nothing commonplace about the manner in which the structure is given architectural significance. Every one of his buildings, I repeat, is the solution of a particular problem, and as such the result is as successful for its own purpose as it is inapplicable to any other. Add to this a most intimate knowledge and masterful handling of building material and decorative ornament of a most personal nature, and the result is a living architecture that defies classification. At least, it only can be classed under one heading, and that is the architecture of Louis H. Sullivan. It is an architecture that is all embracing, derived from the source, and leaving no question open as to its authorship. It is conscientiously



DETAIL OF POLYCHROME GLASS MOSAIC PANEL, EAST
FRONT—THE HOME BUILDING ASSOCIATION COMPANY,
NEWARK, OHIO. LOUIS H. SULLIVAN, ARCHITECT.



GENERAL INTERIOR VIEW—THE HOME
BUILDING ASSOCIATION COMPANY, NEW-
ARK, OHIO. LOUIS H. SULLIVAN, ARCHITECT.



VIEW OF OFFICERS' QUARTERS AND DOOR TO CONSULTATION ROOM—THE HOME BUILDING ASSOCIATION COMPANY, NEWARK, OHIO. LOUIS H. SULLIVAN, ARCHITECT.



LAND AND LOAN OFFICE, ALGONA, IOWA.
Louis H. Sullivan, Architect.

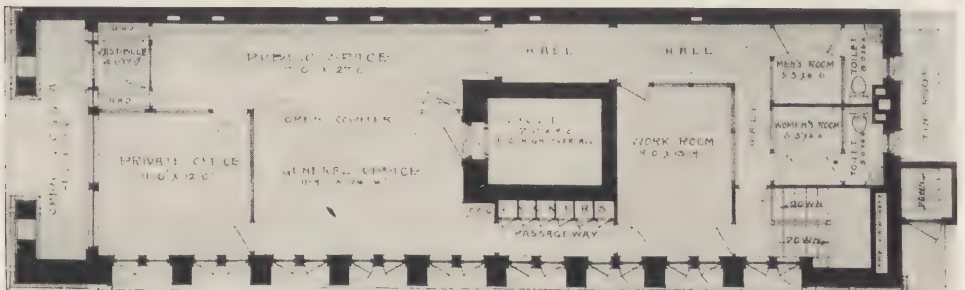
applied to all problems large or small. In fact no work is too small to receive or demand careful consideration and due study by his matured intellect.

Witness for example, the studied simplicity of the Land and Loan building at Algona, Iowa. Here is a little structure clearly designed with a view of the part it was to play as a real estate office in a town of secondary importance. To describe it would be superfluous, as the complete details are fully set forth in drawings of this building shown.

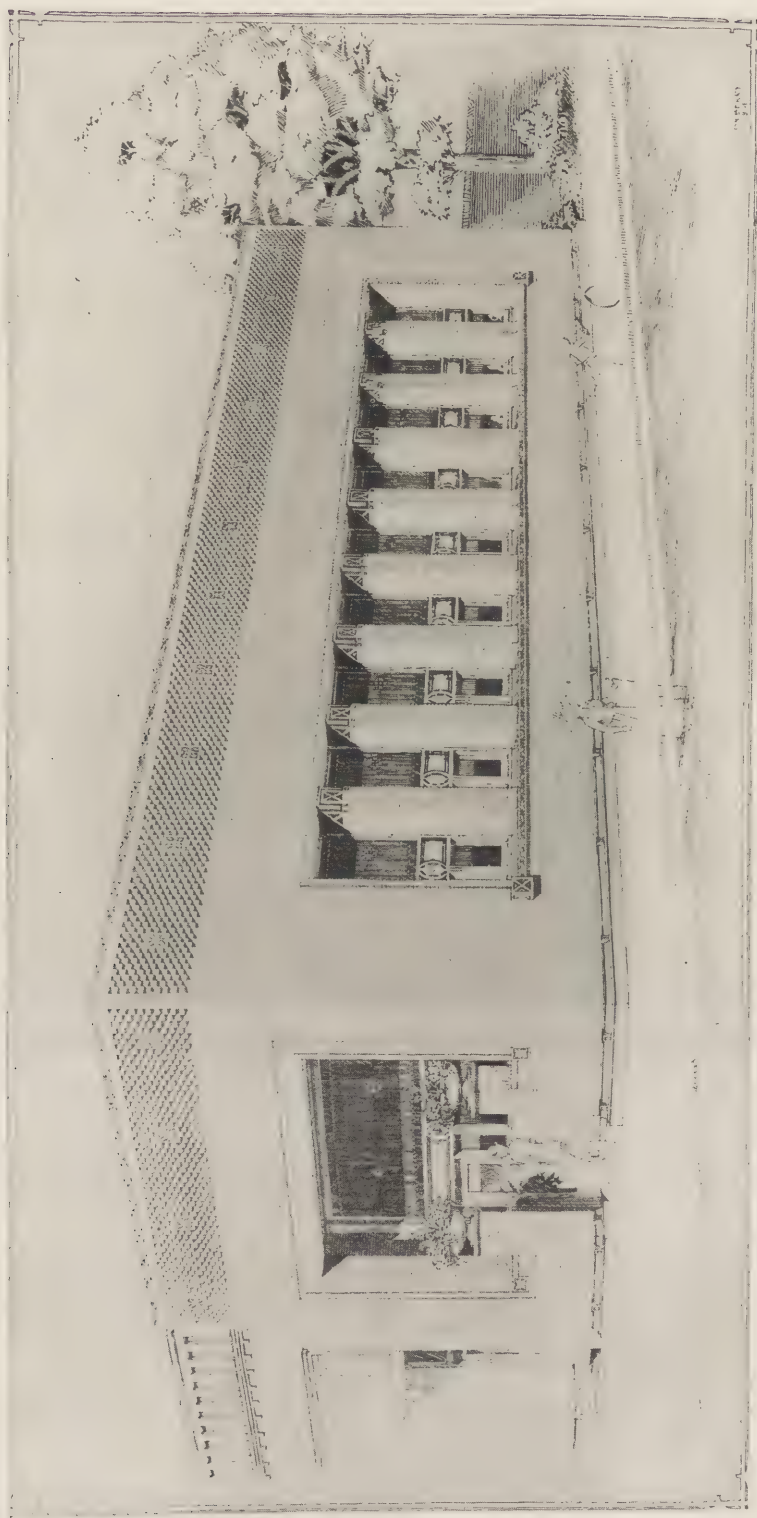
In conclusion, it is to be hoped that the initiative elements brought out by Sullivan's work will not cause these charming designs to be copied and reproduced else-

where, but that modern architects already advancing so rapidly along new lines of departure will value the lesson these buildings advance without copying their exact form. If this is done, the great architectural talent in America now engaged in the attempt to expand along classic lines will, without doubt, eventually develop a purely rational American architecture—an architecture of democracy.

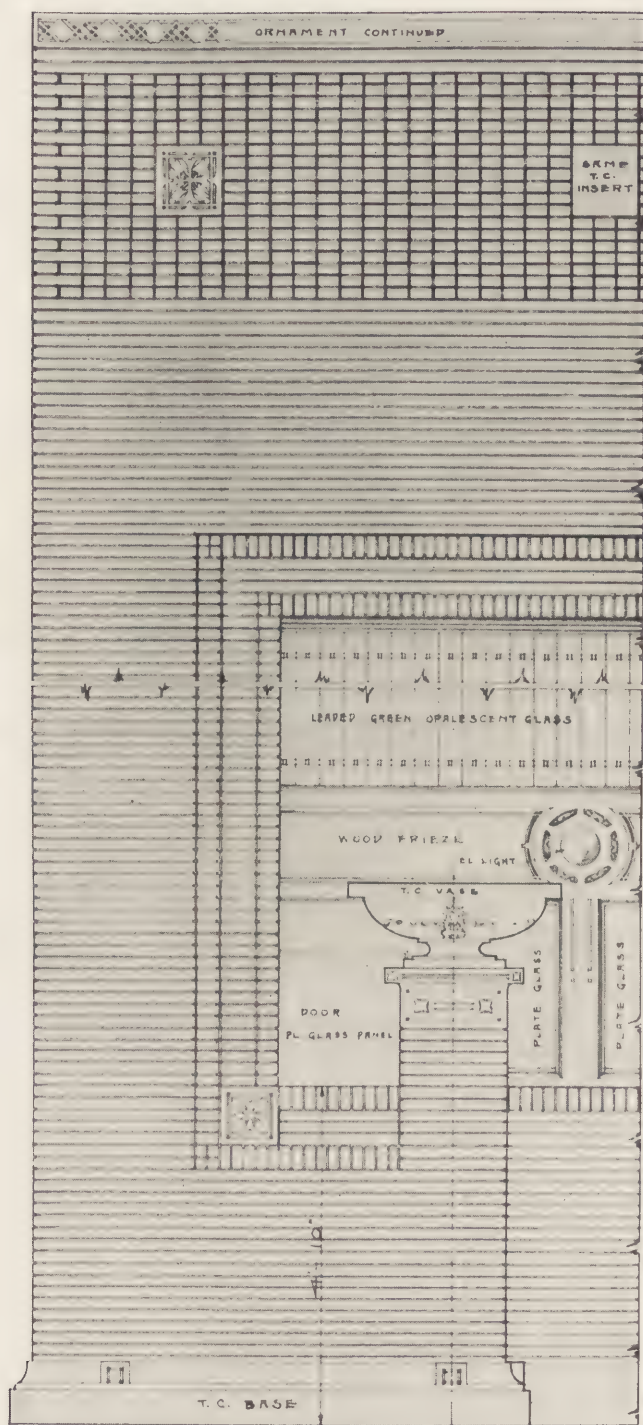
Bannister Fletcher has fairly sized up the present state of architectural endeavor in the following statement: "It is certain that there is a great future for American architecture if only the architects will as much as possible express them-



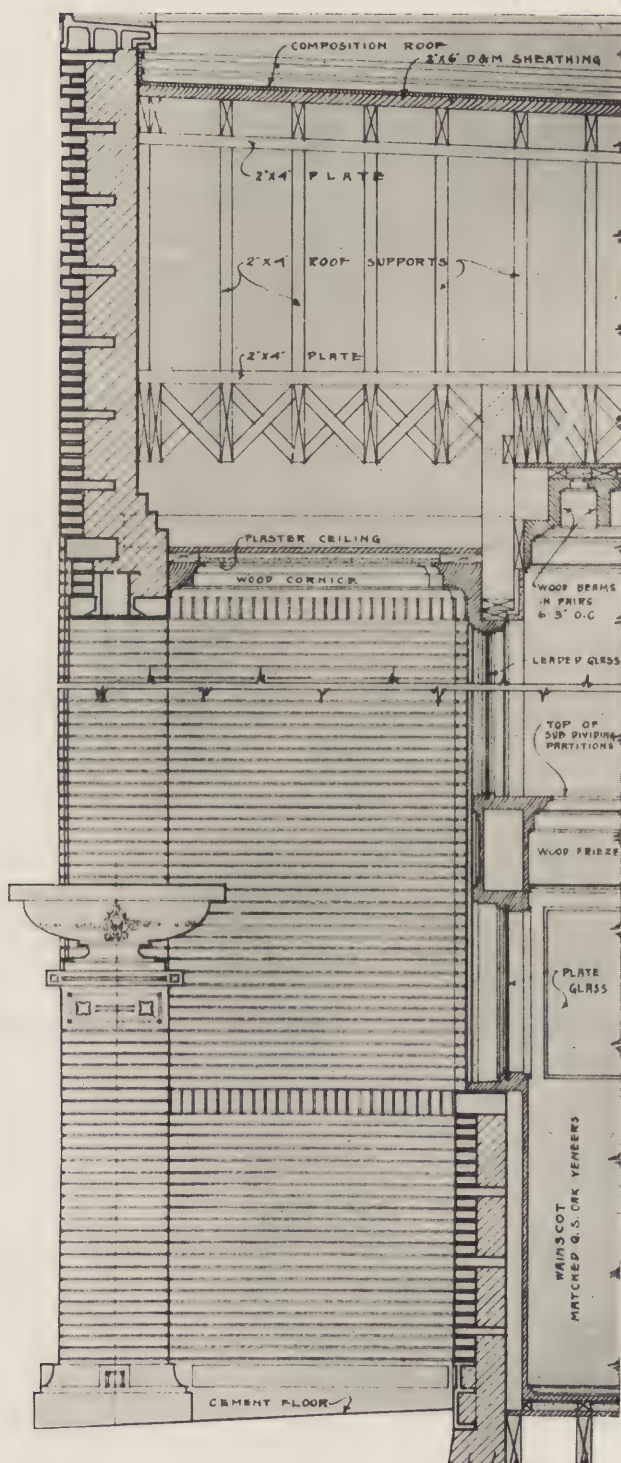
FLOOR PLAN—LAND AND LOAN OFFICE, ALGONA, IOWA.
Louis H. Sullivan, Architect.



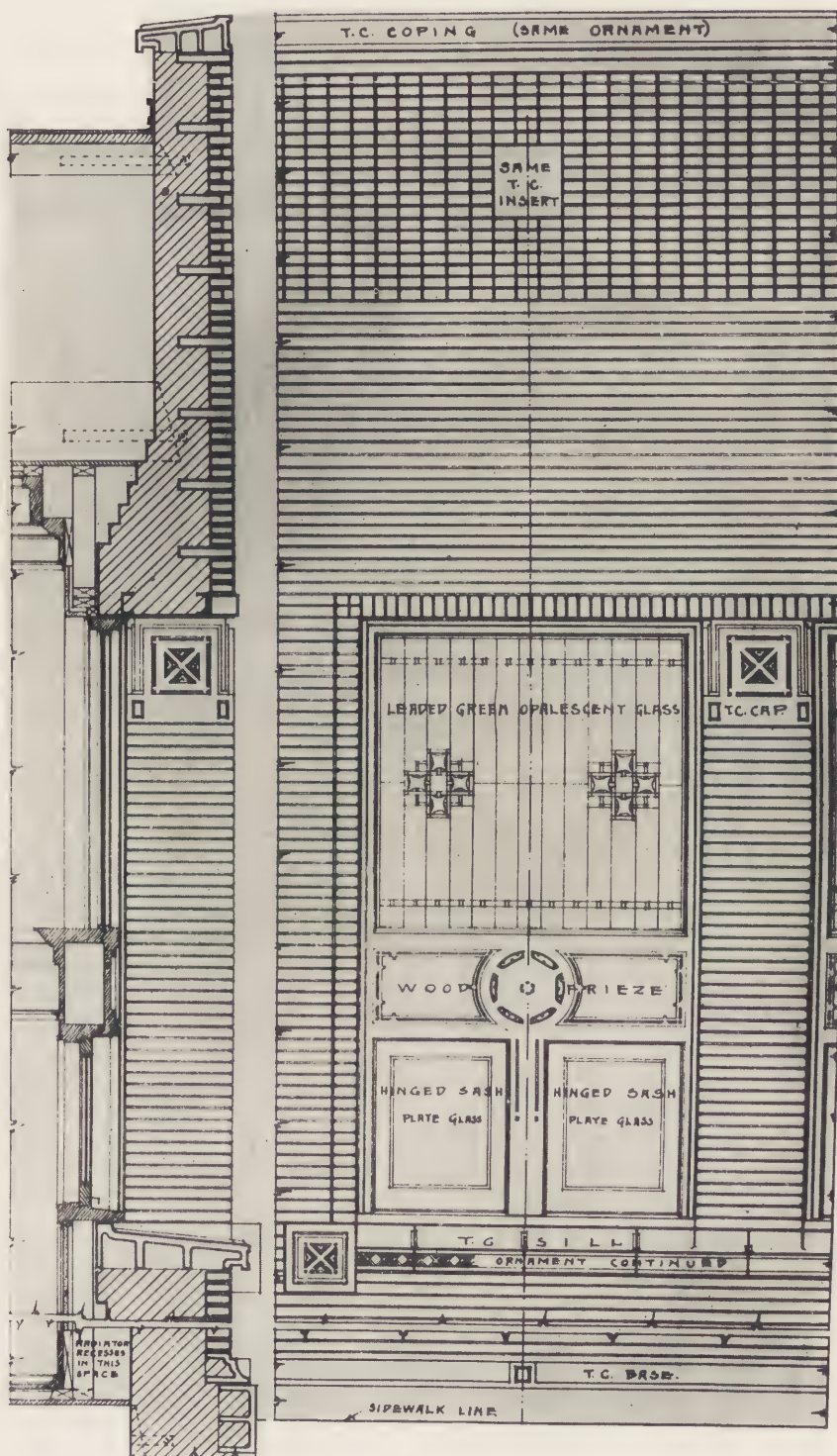
LAND AND LOAN OFFICE, ALGONA,
IOWA. LOUIS H. SULLIVAN, ARCHITECT.



DETAIL OF FRONT ELEVATION—LAND
AND LOAN OFFICE, ALGONA, IOWA.
LOUIS H. SULLIVAN, ARCHITECT.



SECTION THROUGH FRONT—LAND
AND LOAN OFFICE, ALGONA, IOWA.
LOUIS H. SULLIVAN, ARCHITECT.



DETAILS OF SIDE-LAND AND
LOAN OFFICE, ALGONA, IOWA.
LOUIS H. SULLIVAN, ARCHITECT.

selves in the language of their own times. No advance can be made by the copying of ancient buildings as has been done in certain cases constituting a retrogressive movement, and showing a sad want of appreciation of the true value of art. The great historic styles must of course be well studied, not for the forms with which they abound, but for the principles which they inculcate, much in the same way that the literature of the past is studied in order to acquire a good literary style. If architecture is thus studied a good result is assured and the architects will produce works reflecting the hopes, needs and aspirations of the life and character of the age in which they live."

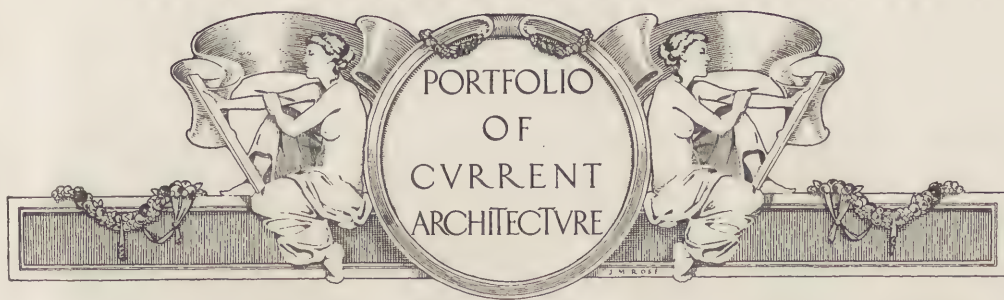
Finally when the opportune moments arrive and Sullivan's entire works are compiled and presented in book form, the

feature that will demand attention will be the uniform character of his architecture. Then it will be possible to follow the long years of progressive growth that led up to the design of these three characteristic small buildings illustrated in this number. Very certainly, any perusal of his works reveals the facts that no attempt was made to liken the ancients to ourselves. On the contrary we will find that the designer was at some pains to impart into his style the mode and manner, the forms and color of present times. In his architecture we have at least something that stirs and stimulates, something that appeals strongly to the imagination and decidedly not an attempt to travesty the Greek or Roman, but an architecture replete with meaning and pregnant with a future that inspires us with high and far-reaching hope.





HALLWAY—ALLOMBY, LAVEROCK, WHITE,
MARSH VALLEY, PA. JOSEPH PATTERSON
SIMS, OF FURNESS, EVANS & CO., ARCHITECT.



DINING ROOM—ALLONBY, LAVEROCK, WHITE-
MARSH VALLEY, PA. JOSEPH PATTERSON
SIMS, OF FURNESS, EVANS & CO., ARCHITECT.



LIVING ROOM—ALLONBY, LAVEROCK, WHITE.
MARSH VALLEY, PA. JOSEPH PATTERSON
SIMS, OF FURNESS, EVANS & CO., ARCHITECT.



LIVING ROOM—ALLONBY, LAVEROCK, WHITE.
MARSH VALLEY, PA. JOSEPH PATTERSON
SIMS, OF FURNESS, EVANS & CO., ARCHITECT.



LIVING ROOM—ALLONBY, LAVEROCK, WHITE-
MARSH VALLEY, PA. JOSEPH PATTERSON
SIMS, OF FURNESS, EVANS & CO., ARCHITECT.



VISTA THROUGH LIVING ROOM—ALLONBY, LAVEROCK, WHITEMARSH VALLEY, PA. JOSEPH PATTERSON SIMS, OF FURNESS, EVANS & CO., ARCHITECT.



LIBRARY—ALLONBY, LAVEROCK, WHITE-
MARSH VALLEY, PA. JOSEPH PATTERSON
SIMS, OF FURNESS, EVANS & CO., ARCHITECT.



LIBRARY—ALLOMBY, LAVEROCK, WHITE-
MARSH VALLEY, PA. JOSEPH PATTERSON
SIMS, OF FURNESS, EVANS & CO., ARCHITECT.



THE BOARD OF ESTIMATE ROOM—NEW YORK CITY HALL. RESTORATION (1902) BY WILLIAM MARTIN AIKEN. RENOVATION AND FURNISHING BY GROSVENOR ATTERBURY, JOHN TOMPKINS, ASSOCIATED.



THE NEW YORK CITY HALL

By Charles C. May

PART II ~ THE WORK OF RESTORATION

IT would be an absorbing task to trace down through these hundred years the story of each room of the City Hall, for each has gathered round itself a wealth of association. The names of those who within its walls have shaped the city's destinies form a veritable civic roll of honor. The more obvious traces of this romance, it is true, can be gained by a visit to the Governor's Room, but to the lover of the City Hall the charm of historic reminiscence is not so local. Each room and meeting place, the rotunda, the landings of the graceful stairway, all are eloquent with the presence of the city's greatest men. It's portico witnessed the brief fierce struggle between the military and Mayor Woods in 1857; under it's dome the bier of Abraham Lincoln rested on its solemn triumphal progress from Washington to Illinois; it's charred roof trusses tell of the rush of volunteers to save the building from the destruction that threatened in '58.

Modern restorations in the City Hall have been called intelligent, and so we earnestly believe them to be. But it must not be conceived that the quality of work may be measured and classified by the degree of literalness of the restoration. It is neither possible nor desirable that every form of anachronism be removed. Such a result could be approached only by abandoning all official occupancy of the building and re-dedicating it (as may still conceivably happen) for use as municipal museum, portrait gallery, and treasure house for memorabilia connected with the city's past. In the meantime, the principal rooms have been preserved whenever possible for their original uses. Sometimes the necessity for re-adjustment has been frankly acknowledged.

Thus the President of the Board of Aldermen occupies today the original offices of the Register and the Surrogate; the Mayor's new private office existed first as a committee room; the clicking of many typewriters now fills the quarters assigned in 1811 to Mr. and Mrs. Skaats, the housekeepers; while the Mayor's recent Committee on Food Supply held meetings in the combined Dungeon for Women Prisoners and the Office of the Captain of the Watch.

The change in the form of municipal government when Greater New York was created in 1896 caused the city to embark upon the larger operations of recent years. First were cleared out the dividing partitions from the eastern second floor, turning several court rooms into a single space—the present Aldermanic Chamber. Next later than this, and more satisfactory in an architectural sense, was the renovation of the large room at the other end of the building, now known as the Board of Estimate Room. The treatment of this room in reserved simplicity, with detail studied in the spirit of McComb's own work, marks its architect, Mr. William Martin Aiken, as among the first of this generation to conceive a restoration in its true sense. His work (it was completed in 1902) may therefore be regarded as ushering in the new and brighter era for the City Hall—the initial step in a movement that is still in progress.

There is a certain sorry comfort in knowing that the frequent overcrowding that occurs here is by no means entirely a result of present-day conditions. One finds that back in 1829 "it has been remarked that there is no apartment in the City Hall sufficiently large to contain the citizens at any general meeting. This is



THE NEW YORK CITY HALL, FROM THE NORTHEAST. THE BROWNSTONE WALLS ON THE REAR ARE PAINTED TO THE TONE OF THE ADJOINING MARBLE.

considered a defect, which, however, may be easily remedied by erecting another building connected with it, for which there is ample space of ground in the rear."

The Board of Estimate Room was originally called The Court of Sessions. "This is a spacious apartment," writes Goodrich, "measuring 70 feet by 42. It is set on the northwest end of the building, and is neatly and conveniently fitted up for the accommodation of the judges, the officers of the court, and for the Public, who have access at all times during the sittings. In this room are held the General Sessions of the Peace, and the Sessions of the State Court of Oyer and Terminer. These being courts of criminal jurisdiction, they excite much interest, and draw a large concourse of auditors. The largest room in the Hall is, therefore, appropriated to their use."

"The seats and furniture in the room are constructed in such a manner that

they can be easily removed to prepare for the corporation feasts that are held here on particular occasions."

The restoration next in sequence and perhaps richest of all in historical association and appeal, was that which redeemed from long neglect the trio of central southern rooms on the second floor now known collectively as the Governor's Room—a title applied originally only to the central unit of the three. This marked too, the entrance of individual civic pride into a field usually reserved for the municipality. The entire cost of the work—a substantial sum—was borne by Mrs. Russell Sage, who generously came to the rescue after the city had, from reasons of economy, declined to make the required appropriation.

The Governor's rooms—speaking literally of the three—are essentially the state quarters of the City Hall, and that in both senses of the word. Dedicated



DETAIL OF MAIN VESTIBULE (DOORS ARE
NOT ORIGINAL)—NEW YORK CITY HALL.



MCCOMB'S SKETCH FOR STAIR STRING—NEW YORK CITY HALL.

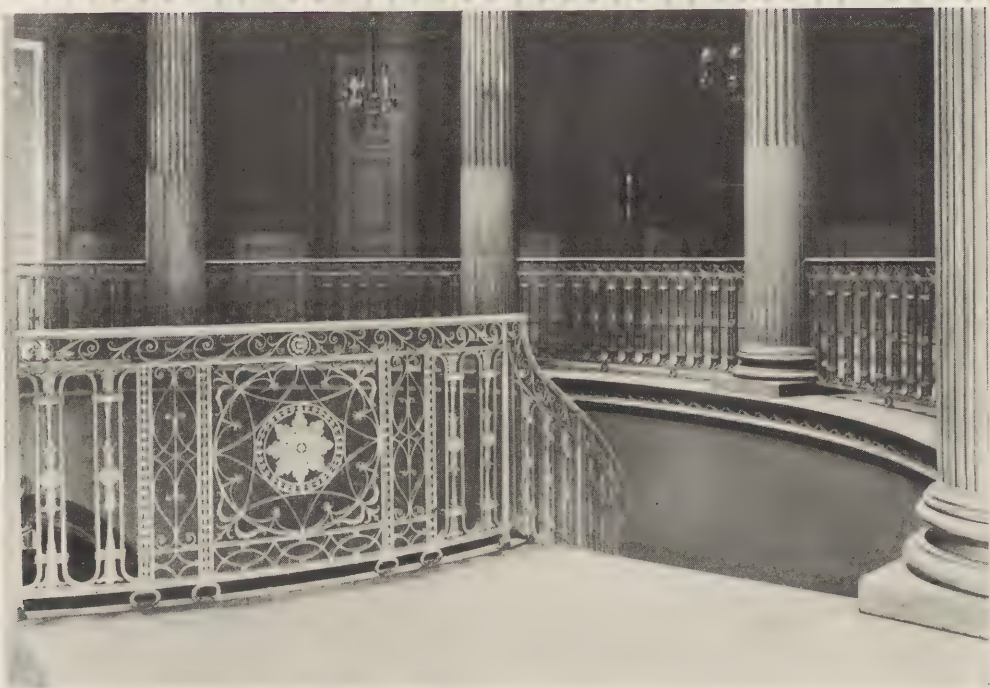
from the first to "the use and accommodation of the person administering the government of this State," the Governor's Room was in the early days the seat of State government within the city, and actively used as such. It was not until much later that the term became a dead letter.

In its other role, that of formal reception room for the city's most distinguished guests, the Governor's Room has witnessed many a notable gathering. Perhaps chief among them was the reception (or series of receptions) tendered to General Lafayette on his revisiting America in 1824. After according him a welcome that amounted to a triumphal entry, the Common Council informed him that "the Portrait Room" (the Governor's Room had even then acquired a good collection) "in the City Hall is appointed to the use of the Marquis, where, during his stay he will, between the hours of twelve and two, receive the visits of such of the citizens as are desirous of paying their respects to him."

Less spectacular were the New Year's receptions when the citizenry offered annual greetings to their Mayors, and the

occasional gatherings when the Governor was officially "at home." This latter custom has been happily revived during the past year in Governor Whitman's reception during the city's celebration of the two hundred and fiftieth anniversary of its present form of government.

For the work of restoring the Governor's Room Grosvenor Atterbury was selected as architect, with his associate, John Tompkins, in collaboration. Most fortunately, the original drawings by McComb had recently been brought to light in the archives of the New York Historical Society. These drawings, with others loaned by his descendants, were carefully studied for hints of his own treatment; Sir William Chambers' *Treatise on the Decorative Part of Civil Architecture* (a copy owned and annotated by McComb) yielded further ideas; two windows, shown on the drawings, but since bricked up, were re-opened a bit of wainscot cap, unearthed during the work of demolition, and checked with McComb's sketches, offered the solution of that particular problem; his portfolio yielded also a motive for the chandeliers, translated, to be sure, to give light from



IRON RAILING AT ROTUNDA—NEW YORK CITY HALL.



DETAIL OF MAIN STAIRWAY—NEW YORK CITY HALL.



MARBLE BAND AT ROTUNDA. THIS CARVING HAD BEEN ALL BUT OBLITERATED BY PAINT—
NEW YORK CITY HALL.

electric instead of real candles—in such painstaking and minute research was the entire work carried on.

The fact that the Governor's Room had also been the "Portrait Room" was not lost sight of—rather, the portraits have been made to form the chief decorative note, counting perfectly against their setting of broad, flat wall panels. The chief emphasis is focussed upon the two full-length portraits—Washington and George Clinton—set as over-mantels at opposite ends of the center room, and adequately carried by architectural frames.

Since its re-opening in 1909 the Governor's Room has exercised an immeasurable influence. Furnished with important memorabilia of New York, its walls peopled with the faces of those who have dominated in the large affairs of the city, these rooms have daily received the visits of surprising numbers—groups of school children, guided by teachers; students of municipal history; sightseers from other

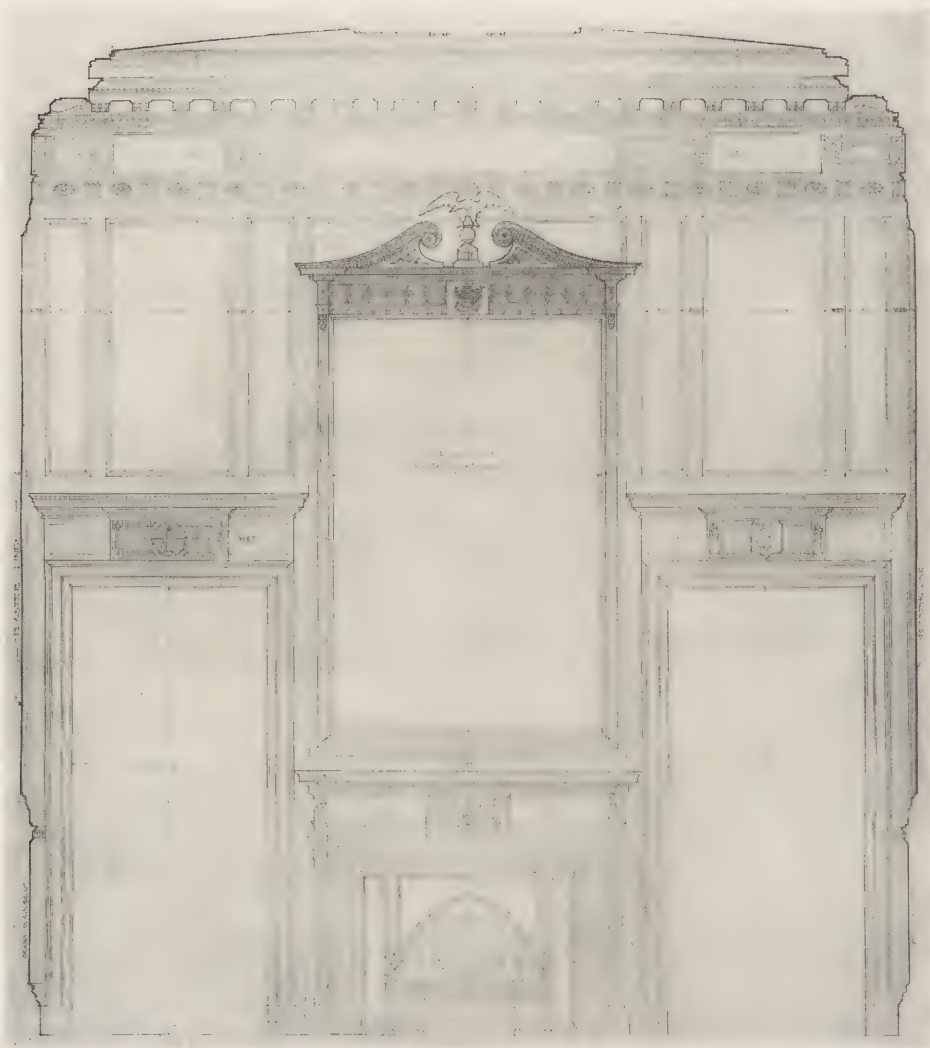
cities and other States; notable travelers from the far corners of the earth. Let no one question the value of a municipal museum such as the Governor's Room.

With two important sections of the City Hall thus placed before the public as object lessons in restoration, further progress was conditional upon the attitude of the President of Manhattan Borough, under whose jurisdiction falls the care of public buildings. The needs were sensitive appreciation, initiative, and patient perseverance, and such qualities were eminently supplied by Mr. George McAneny when he became Borough President. The impelling turn had already been given to the wheel, the gathered momentum of two successful restorations had been invaluable, but it may be safely stated that from 1910 down to the present it has been Mr. McAneny's hand, quietly and judiciously applied, that has kept the machinery from running down.

It was with unquestioned wisdom that the portion of the building selected for



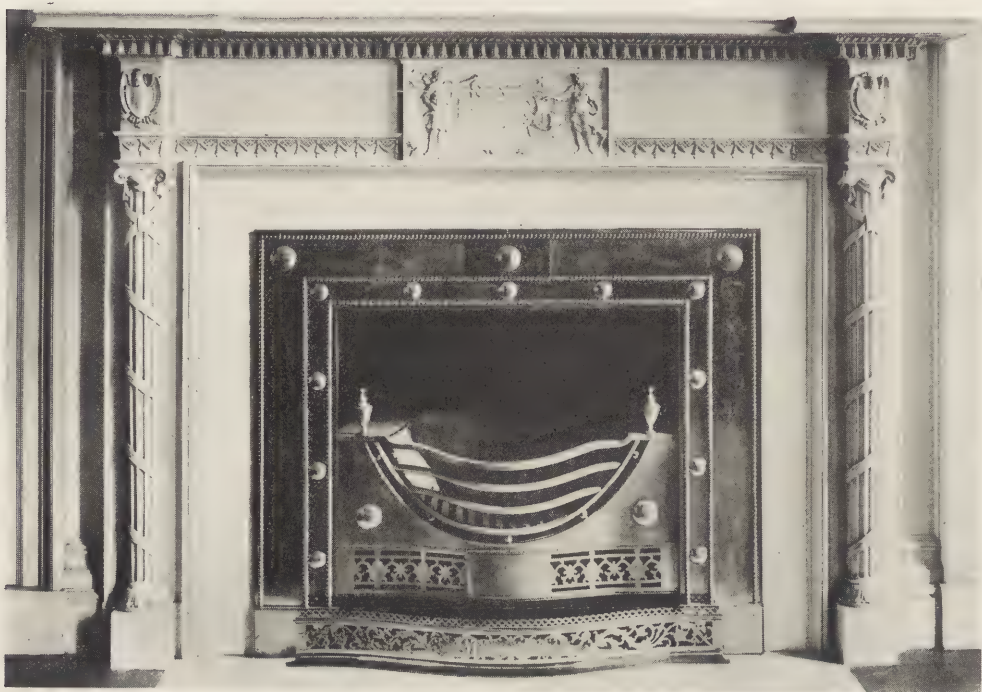
THE GOVERNOR'S ROOM, CENTRAL UNIT—NEW YORK CITY HALL. GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORATION. JOHN TOMPKINS, ASSOCIATED.



WEST ELEVATION OF MAIN ROOM, GOVERNOR'S SUITE—NEW
YORK CITY HALL. GROSVENOR ATTERBURY, ARCHITECT
FOR THE RESTORATION. JOHN TOMPKINS, ASSOCIATED.



DETAIL OF GOVERNOR'S ROOM, SHOWING ONE OF THE
COLLECTION OF TRUMBULLS—NEW YORK CITY HALL.
GROSVENOR ATTERBURY, ARCHITECT FOR THE RES-
Toration. JOHN TOMPKINS, ASSOCIATED.



FIREPLACE IN GOVERNOR'S ROOM—NEW YORK CITY HALL.
Grosvenor Atterbury, Architect for the Restoration. John Tompkins, Associated.

the next restoration was that southwest wing of the second floor, known through a hundred years as the Council Chamber. In this room the meetings of the Common Council had been held almost from the first. Not the very first, for the Council, it seems, in eager anticipation of the City Hall's completion began holding their weekly meetings in the Mayor's Room (now the Mayor's Reception Room) before the middle of August, 1811. That even these patient souls were tried by the conditions that surrounded them appears from this resolution early in 1812. "Whereas the new City Hall being in an unfinished state and abounding with combustible materials, prudence requires as a measure of precaution that the use of fire therein at present be wholly prohibited, and though its central situation and commodious apartments render it a suitable place for the meeting of the Board, yet as the safety of the building ought to be consulted in preference to the season of the members" it was proposed that the Board return to its "former place of meeting in the old City Hall." The vote

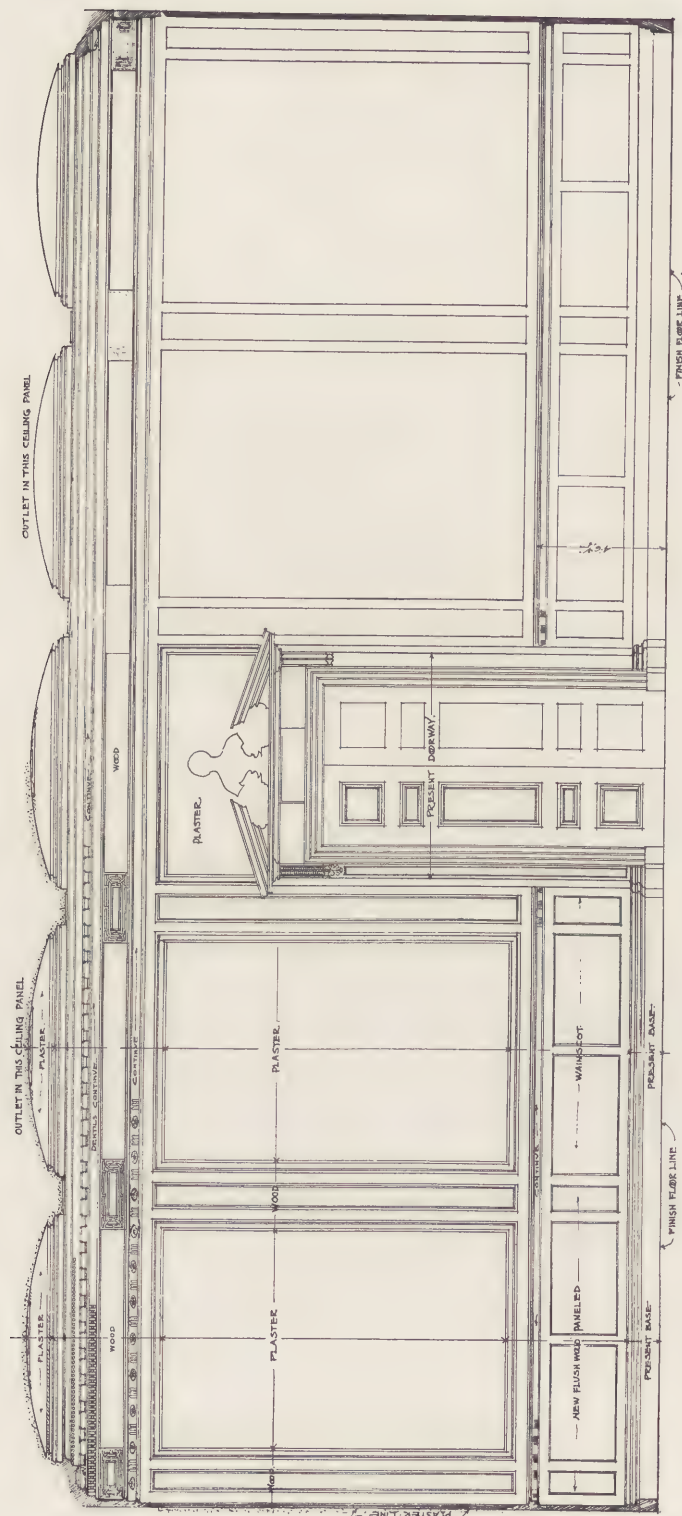
was in the negative, however, and shortly afterward the Board assembled "at the Common Council Chamber in the City Hall, which was prepared for their reception."

Like most of the "apartments" in the City Hall the Council Chamber was ultimately lost to its original purpose. When in 1910, Mr. William A. Boring was selected as architect for the restoration, so much subdivision and temporary partitioning had occurred as to destroy all resemblance to the Council Chamber of McComb's day.

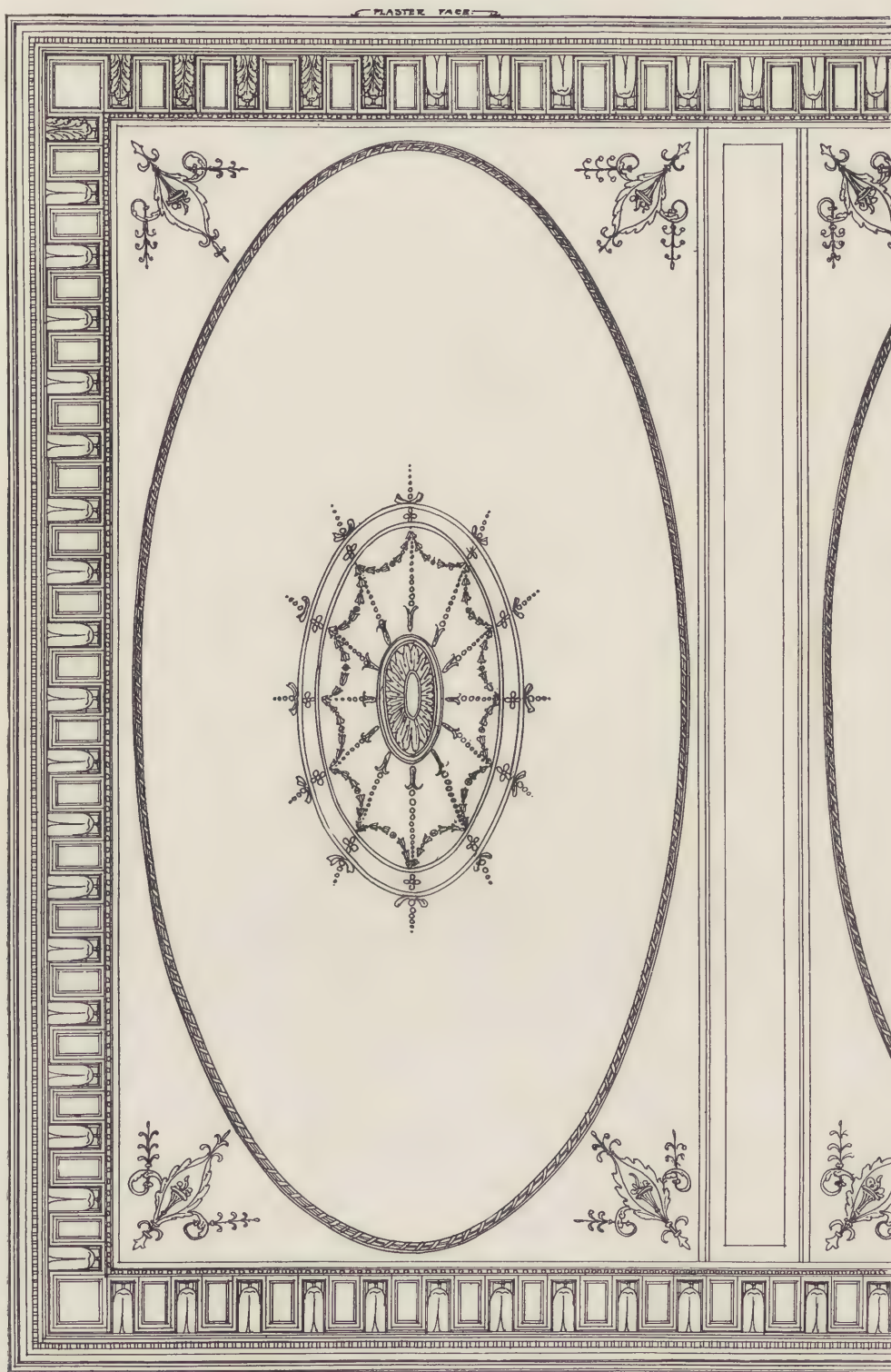
As in the case of the Governor's Room McComb's portfolio yielded studies which proved most helpful. Even more valuable was a contribution by a member of the Art Commission—a print published in 1830, doubtless before any material changes had been made. Tantalizing as is this print in the things it does not show, and insistent as are the figures in effectually blotting out important details, this picture yet gives a fairly comprehensive view—the columnar circle inscribed within the square of the walls;



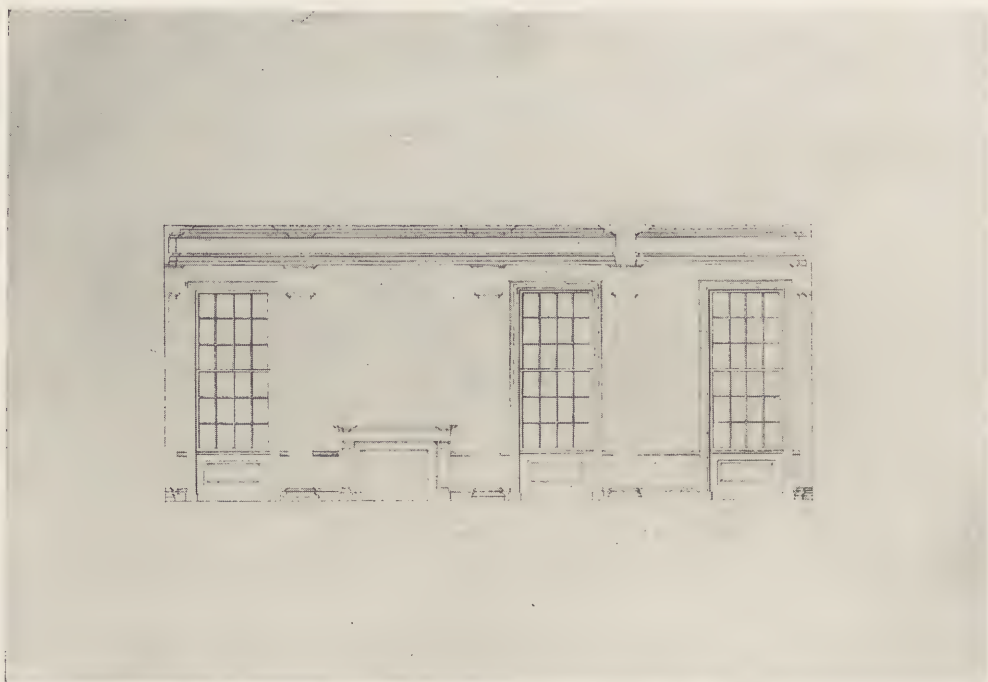
THE GOVERNOR'S ROOM, EAST UNIT—NEW YORK CITY HALL. GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORATION. JOHN TOMPKINS, ASSOCIATED.



NORTH ELEVATION FOR ALTERATION OF MAIN ROOM IN GOVERNOR'S SUITE, NEW YORK CITY HALL. GROSVENOR ATTERBURY, ARCHITECT. JOHN TOMPKINS, ASSOCIATED.



PLASTER CEILING, MAIN ROOM, GOVERNOR'S SUITE—NEW
YORK CITY HALL, GROSVENOR ATTERBURY, ARCHITECT
FOR THE RESTORATION. JOHN TOMPKINS, ASSOCIATED.



McCOMB'S SKETCH FOR THE COUNCIL CHAMBER—NEW YORK CITY HALL.

the rich Corinthian order and entablature; the shallow, refined curve of the dome ceiling. It includes also the canopy over the chair of the presiding officer, with that "gilt eagle" which the Council in 1818 directed to be placed there, together with such other embellishment as McComb might deem suitable.

Further research and study were needed to piece out the lacking data, but results were gratifying. The fireplace, for instance, was produced from the apparently solid west wall, its presence revealed not by divining rod nor by intuition, but by study of McComb's original drawings. The details of entablature and ceiling are worthy of note. True in scale, dignified, restrained, the ornament has that clean-cut, deeply incised quality that characterizes some of the best of the old work. A notable instance of such feeling occurs in the Octagon House in Washington.

Mr. Boring's restoration fitted the room for the use of the President of Manhattan Borough. The requirements of space for secretarial and clerical staffs have lately outgrown the space here avail-

able, so that the Council Chamber has for two years been exempted from active service as an executive office, entitled to enjoy henceforth a more sedate life as the occasional conference room for committees of the Board of Estimate.

From 1911 down through 1915 the work of rehabilitation has gone on almost continuously under the architectural supervision of Mr. Grosvenor Atterbury and his associate, Stowe Phelps. The start was made by contracts which for want of a better title were known as "General Repairs No. 1 and No. 2." Such operations were prosaic, but essential. Reference has been made to the utter disregard for architectural or municipal propriety with which every variety of pipe known to plumber, every species of wire strung by electrician, had been allowed to assume right of way in the "apartments," and corridors—even about the Rotunda. The west stairway to the basement had been rudely partitioned off and disfigured with shabby wooden stairs; panel work and wainscots everywhere were fallen into a sad state—either by opening of the woodwork



THE COUNCIL CHAMBER—NEW YORK CITY HALL. NOW
A COMMITTEE ROOM FOR THE BOARD OF ESTIMATE.
WILLIAM A. BORING, ARCHITECT FOR THE RESTORATION.

into gaping cracks, or through "repairs" with putty, plaster and paint, until all delicacy of profile had been lost. The obvious and, it may be added, more economical corrective would have been to discard the old wainscots completely and to reproduce them in modern cabinet work. Such a method, however, did not accord with the ideas of the Art Commission and the architect, who have consistently regarded as sacred and inviolate every inch of original wood that has come down to us. The wainscots, the lovely carved door heads and pilaster caps, all were accordingly given successive treatments of paint-remover and scraper until the profiles of mouldings and carved ornament were once more revealed as McComb had designed them. Nor was it from woodwork alone that it has been necessary to set free the paint-smothered carving. Around the circumference of the Rotunda runs a band of marble, beautiful in design and splendid in execution—the work, doubtless, of the master sculptor Le Maire. This, too, had had the exquisite detail all but obliterated by layer upon layer of "lead and oil," and it was liberated only with infinite pains and patience on the part of the workmen.

Incidental to these general repairs was the resetting of several bulky monoliths, inscribed, one with the names of the building committee first entrusted with the City Hall's construction; another, those of architect, sculptor, master mason et al.; a third, the table of Federal measures. Originally parts of the attic coping, withdrawn during Mayor Van Wyck's term of office, these huge stones were temporarily placed in the main corridor, to save them from further deterioration. They are now built into the

walls of the basement corridor, where they may be preserved indefinitely, and still not clash with architectural environment.

Investigations as to structural conditions have brought to light some surprising instances of neglect. Floors had sometimes sagged. Others were added until at some points five layers of blocking and boarding had been allowed to pile themselves with never a question as to the cause of the sag. Some of the huge wooden girders (they span up to forty-two feet) had begun to bend or to check. Worse than these were the sins of omission that had been committed in reframing timbers cut through for one reason or another. Too often beams that had a resting place at one end were neglected at the other, until one feels that only Providence actively engaged to overrule gravity had averted disaster.

This is by no means to cast aspersions against McComb, nor against the materials with which he wrought. If wooden girders have begun to ask aid of steel I-beams, it is because of superimposed loads not dreamed of by McComb; if beam ends have been sadly attacked by rot, it is because of long-continued dampness from long-neglected leaks; if the cupola threatens to resolve itself into its component parts, it is because it is not the real, but a reproduced cupola, put together in 1858 by builders less careful than McComb. Let it be said, then, in a word, that where materials have been left to themselves to do the work intended for them to do, they have stood very worthily to their tasks, and modern investigation, in greatly the majority of cases, finds them as sturdy and tough and solid as ever.

THE ARCHITECT'S LIBRARY



THE FAMOUS IRONWORK OF SPAIN

By MARRION WILCOX

A TRAVELER from America who visits Seville is sure to notice with great pleasure the wrought-iron screens, gates, or rejas that adorn the ample doorways of many an ancient residence. From the street one catches a glimpse, through the screens, of the patios, or ornamented courtyards, with their fountains and exotic plants, and the characteristic patterns of the wrought-iron screens are charmingly emphasized by such backgrounds. The reja guards against encroachment, while revealing the interior quite adequately.

I mention the Sevillian doorway rejas, on high screen gates, merely because this seems a pleasant way to introduce this book* to architects and sincere students of architecture. In this brief review I shall try to epigrammatize the contents of a very genuine and sufficiently extended treatise.

The Moors who overran Spain (the authors remind us) expressed, with iron as a medium, not only their basic principles of design, but also the delicate and

elaborate method they applied to the precious metals. During the Romanesque and early Gothic periods, French ironwork also exerted its influence in the western peninsula. Italian Renaissance architecture, as it was interpreted and applied in Spain, gave to the ironworker such an opportunity for the exercise of his native talent that he achieved grandeur and architectonic quality in his work, surpassing the attainments of ironworkers in other lands; but if we are to appreciate a distinguishing characteristic of the arts of Spain, we must emphasize the fact that the imposing size of some of the Spanish ironworker's products is only one of the noteworthy features. Equally interesting is the exotic suggestion which, in Spanish architecture and industrial arts, reminds us constantly of Spanish history, in the usual sense, and of the geological history of Spain in a very special sense—for, geologically speaking, southern Spain once belonged to the southern continent, and not to Europe at all. Our authors do not mention this circumstance, but they say: "The Moorish occupation of seven centuries is a circumstance unparalleled in any other European country and its in-

*Spanish Ironwork: being an account of the extent of the craft in Spain from earliest times. By Arthur Byne and Mildred Stapley. Fully illustrated, 8vo. Price 50 cents in heavy paper cover, \$1.25 bound in cloth. New York: The Hispanic Society of America, 1915.

fluence on all Spanish art was lasting. This Orientalism was sometimes preserved pure, sometimes combined with European designs." Moorish and Gothic art blended, with harmonious results, and to this blend the name *Mudéjar* was given.

For purposes of decoration in connection with architecture in the Iberian peninsula, it appears that iron was not truly popular until demonstration of some of its art values had been made in England and France. Then its use as a decorative architectural feature invaded and made pacific conquests in Spain. To this extent it may be called a borrowed talent. But Spain carried the use of iron farther than the northern countries ever did. To be explicit, "Door hardware," the authors say, "with the exception of the strap hinge, developed to a point undreamed of elsewhere; knockers, escutcheons, bosses being infinitely more plentiful. Hardly a window in the land but had an iron grille or *reja* When furniture came into general use (early Spanish houses were as devoid of chairs and tables as Moorish homes were) iron was often used as a diagonal brace between vertical supports, and even entire chairs, tables, etc., were made of it. When in due time the balcony began to be an architectural feature it was upheld by a row of interesting scroll brackets. In the churches, candelabra became massive and imposing, railings or screens (*verjas*) grew to be of towering height, and even entire pulpits were beaten out of iron." It is clearly shown in the book that a large part of this work which we see today is *Mudéjar*.

Our authors make special mention of the great doors of the Puerta del Perdon in the mosque of Cordova, but these are copper-plated; and a pair of (also mentioned) wooden doors in the Madrid National Museum are bronze-mounted. One of the earliest iron-covered doors is in the cloister of Tarragona Cathedral—thirteenth century doors, formerly covered by iron plates, stamped, gilded and fastened with copper nails. The colossal iron-plated main doors of the western facade of the same cathedral (sixteenth century) are of wood sheathed in iron

plates, with copper nails and a copper rosette in the centre of each plate. Hinges and knockers are most elaborate in design. In the back plates of the knockers and in the huge hinges at the top, a very decorative result is obtained by successive thicknesses of pierced tracery. That, of course, is a Moorish idea. Moorish, in fact, the entire scheme must be called, with only the shadows of the knockers to give relief to the flat patterning. In the west portal of Santa Marie del Mar at Barcelona, the doors are covered with iron plates cut to a pattern; and the doors in the main portal of Huesca Cathedral are covered with beaten iron, fastened by nails made apparently of brass.

The process of treating iron so as to prevent rust, or to reduce rusting to a minimum, is called one of the lost arts. According to our authors, it is generally believed that the desired result was secured by dipping in oil. The iron was heated to a brilliant cherry red. When its molecules were thus separated it was immersed in linseed oil, or some other fine, transparent oil, which penetrated—perhaps only to a very slight extent—the mass of metal, making a rustless and hard surface that could be polished fairly well.

The metal that we have too often regarded as most useful, least beautiful, was employed in another way, characteristically or peculiarly Spanish. Iron pulpits were often designed in connection with the iron *rejas*. A few examples, excellent in design and workmanship, may be seen at Avila, Burgos and other places in Spain. The pulpits are generally in pairs, one at each side of the Capilla Mayor. The Avila examples are, first, flamboyant Gothic, beautiful and interesting as a piece of architectural design and as ironwork, and, second, Renaissance. Both pulpits are of gilded iron, hexagonal in plan, and ten feet in height.

The architectural importance of the Spanish ironwork is clearly stated on pages 69 and 70, where we read that the influence of the fifteenth century Italian art was manifested in Spain at the close of that century, and the term *Plateresque* has been chosen to designate early Spanish Renaissance architecture be-

cause the ornamentation of Spanish structures belonging to that period resembles "the minute manner of the silversmith's (or platero's) art." This designation would in itself suggest that metalwork was popular at the time. The first Plateresque buildings were the hospitals built by Enrique de Egas of Flanders in Toledo and Santiago—the original Santiago which has given its name to interesting cities in the New World. As Gothic had become firmly established, it was not immediately supplanted; on the contrary, buildings in that style were erected after the Renaissance invasion, and Renaissance edifices borrowed many Gothic features. The result is characterized as "one of charm and novelty." That will not be conceded in certain quarters. We shall be willing to concede however, that there was a certain degree of novelty, though not absolute novelty, in this blending of styles, and that the result was not wholly devoid of charm. In the decorative accessories especially, some very effective hybrid forms are found. Moorish art was ornamental, rather than structural. The Spaniards had felt its influence during long ages. Therefore the superficial side of the Italian Renaissance appealed most strongly to them. Moreover, the fact that Spanish Renaissance is invariably sumptuous finds its explanation in part in that vast territorial increase that flattered Spanish pride in the sixteenth century; and the treasure brought back to the Tower of Gold in Seville paid the ironworker's wage, no matter how difficult the task. As the activity of the smith generally reflected the condition of his country, Spanish ironwork (we read) became a thing of unsurpassed grandeur. It remained largely *Gotico-florido* during the beginning of the Renaissance or Plateresque period, but when, after a time, the new style dominated with its rich architectural treatments and its unhesitating use of the human figure (previously rare in iron) the smith became a magician. The English authority, J. Starkie Gardner, says that the Spanish ironworker of that period produced things "of so grand and impressive a character as to confound all our previous

conceptions of the capabilities of the material." The artistic craftsman of that day, to put the matter plainly and simply, refused to be confined within the limits which the stubborn nature of his material and the technical difficulties of his craft seemed to impose. He was truly the ironmaster.

An impression of the scope of this book may be obtained from the following list of the subjects that are discussed carefully and interestingly. Spanish ironwork before the Gothic period; Gothic rejas and pulpits; Gothic hardware and domestic utensils; the development of the Renaissance reja; Renaissance church rejas; smaller Renaissance productions; the last of Spanish ironwork. It is indeed, as a publisher's note asserts, "the most complete account of Spanish ironwork yet printed." The value of the book is enhanced by an index and a catalogue of ironwork in the collection of the Hispanic Society of America. The illustrations, 158 in number, are uncommonly good.

A MANUAL ON LIGHTING

Readers of the ARCHITECTURAL RECORD are already familiar with the persistent ambitions of Mr. F. Laurent Godinez in behalf of American eyes. He has applied himself manfully to the task of making us acquainted with our own shortcomings in a branch of science now lagging a full century behind its sister mechanical arts. His volume entitled *The Lighting Book* (McBride, Nast & Company, New York; octavo, pp. 109, numerous plates; \$1.25) brings together in readable and thoroughly intelligible form his tested theories of lighting as applied to domestic interiors. The subtitle, "a manual for the layman, setting forth the practical and esthetic sides of good lighting," plainly indicates the two-fold purpose that present-day lighting has come to serve: namely, the primary purpose of the illuminant—gauged according to ophthalmic needs—coupled with the second but not entirely accessory or secondary purpose of the artistic effect of light—gauged according to its relation to interior design. This is, to say the least,

an ultra-modern conception; but its manifest actuality is attested by contemporary results, architectural and optical, not to mention its constantly increasing application in public buildings and in educational institutions.

The new volume considers at length the use and misuse of light from a practical and material point of view, and the value of light as an assistant element, in which is vested the ability to mar utterly an otherwise successful design, from the decorator's point of view. It discusses direct and indirect lighting, intensity of sources of light, the shading and re-directing of light, and the manipulation

of light and lighting fixtures for decorative effects—in other words, design in light and light sources.

There are many interesting plates and detailed diagrams, arranged in an instructive comparative fashion, more or less on the ancient principle of "the old way" and "the new way," which, properly used, is an effective method of clinching an argument, especially in new fields. We are convinced that light, lighting fixtures, and the use of light practically and artistically are the three constituent elements of a science soon to assume large proportions.

R. F. B.



The Brick Church and Parish House. Presenting a Collection of Designs for Churches, with Articles. Ill. 80 pages, including plate illustrations and plans, 11 by 13 inches. St. Louis: Hydraulic-Press Brick Co.

The Prairie Spirit in Landscape Gardening. By Wilhelm Miller, Department of Horticulture, Division of Landscape Extension, University of Illinois. Ill. 32 pages. 9½ by 12 inches. Urbana: University of Illinois.

Limes and Cements. An Elementary Treatise on Their Nature, Manufacture and Use. By Ernest A. Dancaster, B. Sc. (London). Ill. 189 pp., index. 5 by 7½ inches. New York: D. Appleton & Co. \$1.75 net.

The Kalendar of the Royal Institute of British Architects. 1915-1916—82nd Session. 483 p., index. 5½ by 8½ inches. London: The Royal Institute of British Architects. 62 cts.

Dams and Weirs. An Analytical and Practical Treatise on Gravity Dams and Weirs; Arch and Buttress Dams; Submerged Weirs; and Barrages. By W. G. Bligh, Inspector Engineer of Irrigation Works Department of Interior, Canada, and Member, Inst. Civil Engineering (Lon-

don). Ill. 206 p., index, 5½ by 8½ inches. Chicago: American Technical Society. \$1.50.

Theaters and Moving Picture Houses. A Practical Treatise on the Proper Planning and Construction of Such Buildings and Containing Useful Suggestions, Rules and Data for the Benefit of Architects, Prospective Owners, Etc. By Arthur S. Meloy, Architect. 18 plate illustrations, with line drawings by the Author. 121 p., 7 by 10 inches. New York: Architects' Supply & Publishing Co.

Concrete and Reinforced Concrete. A Condensed Practical Treatise on the Problems of Concrete Construction, Including Cement Mixtures, Tests, Beam and Slab Design, Construction Work, Retaining Walls, Etc. By Walter Loring Webb, C. E., and W. Herbert Gibson, B. S., C. E. Ill. 218 p., appendix and index. 4½ by 7 inches. Chicago: American Technical Society. \$1.50.

Impressions of the Art at the Panama-Pacific Exposition. With a Chapter on the San Diego Exposition and an Introductory Essay on the Modern Spirit in Contemporary Painting. By Christian Brinton, Member of the International Jury. Ill., 199 p., index, 8 by 12 inches. New York: John Lane Co. \$3.00 net.



The Tomb of Perneb.

An Egyptian monument of the year 2650 B. C., the tomb of the "Sole Companion and Lord Chamberlain, Perneb," a dignitary who held high office at the royal capital of Mem-

phis on the Nile, has been reërected at the Metropolitan Museum. The tomb is the largest single exhibit at the Museum and a special salient in the plan of the building had to be laid out to accommodate it. The structure is placed at the north end of the great hall as one enters from Fifth Avenue, and has been rebuilt with the remarkable care and skill which characterizes all similar undertakings at this institution. Electric lighting is provided in the various interiors and also for the exteriors so that all details of construction and decoration are at once apparent to their full advantage, both as to finely gauged relief and as to symbolic coloring. Several small scale models and a number of photographs showing the entire process of dismantling and shipping the tomb are also exhibited.

During the Fifth Dynasty of the Memphite period in Egyptian history, the royal cemetery was located chiefly at Sakkara, which has long been known to us as the site of many imperial pyramid mausolea, notable among them the great stepped pyramid of King Zoser, dating from about 3000 B. C. As a person of exalted position at court it was Perneb's ambition to locate the abiding place of his body, and therefore of his *ka* or double, near that of his sovereign, whose tomb was undoubtedly in the immediate neighborhood, though it has not as yet been found, or at least identified. Since similar ambitions were cherished by all persons of importance near the person of the king, or possibly because of the builders' intention, we find a crowding of monuments which in the case of the Perneb example had made the tomb acces-

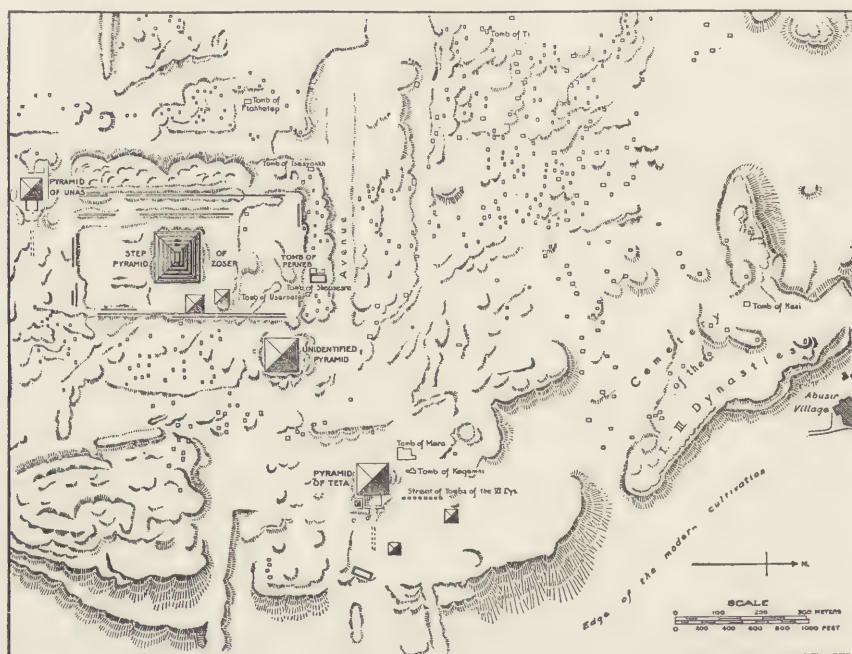
sible only through a narrow alley leading off at one end of the entrance court and parallel with its front.

The structure is in general form a low truncated pyramid of a kind that has in more recent times been given the name of *mastaba*. This rectangular type of building, which is characteristic only of oldest Egypt, generally measures from forty to fifty feet in length, from thirty to forty feet in width, and from fifteen to twenty feet in height, and is oriented closely according to the points of the compass. Its usual form comprises four essential features: 1, a vestibule, sometimes preceded by an open space or courtyard, as in the present example; 2, an offering chamber or series of chambers, where the relatives of the deceased deposited delicacies for his *ka*, which according to Egyptian belief continued the pursuits and activities that had engaged his earthly attention; 3, the *serdab*, or statue chamber, in which was placed a carved likeness of the deceased for the habitation of his *ka* when it visited the tomb; this chamber was generally set apart, no door leading to it and only a narrow vertical slit in the masonry giving the opportunity of a view of the figure, which latter was sometimes accompanied by those of members of the deceased's family; 4, the burial chamber, situated at the bottom of a shaft reaching from fifty to one hundred feet downward through the mass of the tomb and into the rock platform beneath it, the whole of its height blocked up by filling in with stone, sealed at the top and made invisible after the interment (Fig. 2).

The scheme of the Perneb tomb varies from this typical plan disposition in several respects. Its general measurements were fifty-four feet in length by forty feet in width by eighteen feet in height. Owing to the presence of the tomb of Shepsesre, of about the same date and already known to Egyptologists for some years, on its easterly flank, it was found convenient to

build two projections forward at right angles to its front and abutting against the back of the Shepsesre tomb. (Fig. 3.) By this means a courtyard was established measuring about twenty-five feet in width across the front and eight feet in depth. The courtyard was flanked by an entrance chamber, which was reached through a narrow passage to a main street beyond, and by an exterior offering chamber. From the latter through a vertical slot in the masonry the effigies in the statue chamber (Fig. 3) could be seen. The main entrance into the body of the tomb was a recessed

cessible through a short passage the main offering chamber (Fig. 3), the only part of the tomb granted a general decorative treatment. This room was lighted directly by means of a long low window (Fig. 4), giving upon the courtyard at about the lintel level of the doorway, but reduced to a horizontal slit at its inner side to mitigate the brilliance of the sunlight reflected from the desert on all sides and so to retain the requisite degree of the gloom of solemnity. A second burial shaft had been provided for to the north of that of Perneb, probably for a near relative, but although



This and three following illustrations reproduced by courtesy of the Metropolitan Museum of Art.

FIG. 1. GENERAL PLAN OF SAKKARAH CEMETERY, SHOWING LOCATION OF PYRAMIDS AND TOMBS; TOMB OF PERNEB DUE NORTH OF STEPPED PYRAMID OF ZOSER ON CONTINUATION OF LINE ON ITS EASTERN SIDE.

doorway in the middle of the western side of the courtyard, eight feet wide and over thirteen feet in height. (Fig. 4). This led to a vestibule, beyond which, almost on axis with the door, lay the chief burial shaft, that of Perneb himself, in the body of the masonry, but not reached by any opening available after completion of the building. The shaft was five feet square and fifty-five feet deep; it led at its base in the mother rock to the burial chamber proper, which contained a limestone sarcophagus. (Fig. 2). From the south end of the vestibule, however, was made ac-

this carried into the rock platform far below, the burial chamber itself was never finished. (Fig. 3).

Owing to the conditions of construction which in the original tomb showed evidence of haste at various points, due probably to the fact that Perneb had too long delayed the erection of his tomb and approaching death or serious illness prompted him to hurry the work to completion while he was yet alive, and also because of the conditions of the site of its re-erection, all parts of the building were not brought to America, and a few minor changes were also made neces-

sary, e.g., in the width and length of passages to admit visitors and to account for existing walls in the exhibition gallery. Poor original masonry led in some cases, furthermore, to the substitution of plaster blocks for the roughly cut and laid blocks of limestone in the tomb itself. The whole structure having been despoiled by grave plunderers, even to the extent of removing all stone work to the bottom of the fifty-five foot burial shaft, nothing of value was left, although a number of broken jars, parts of wooden *ka* figures and food receptacles were thrown about and disdained even for fire wood by the ghouls.

In view of the fine mode of presentation accorded Perneb's tomb at the Museum, one is prompted to ask what has been done to safeguard the limestone masonry against the effects of the insidious climate of New York; for the stone contains chemical salts, which, though at rest in the dry Egyptian air of the sandy plains, immediately become active under the influence of humidity, even to the extent of causing disintegration within a short period of years. On this point a Museum report offers the following information: "Treatment of the stone by some of the older methods did not prove

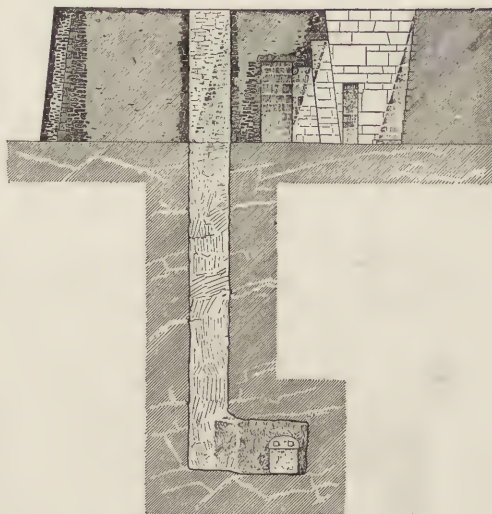


FIG. 2. TOMB OF PERNEB, SECTION SHOWING BURIAL SHAFT AND SUBTERRANEAN BURIAL CHAMBER.

entirely satisfactory and, accordingly, for some five years a chemist was employed in the department in carrying out experiments in the use of other mediums. * * * Experi-

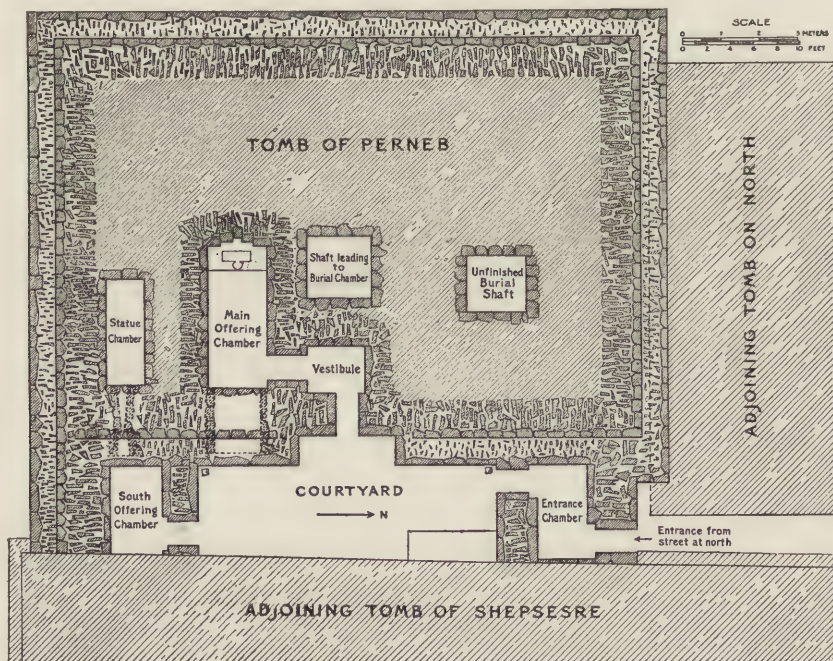


FIG. 3. TOMB OF PERNEB, PLAN SHOWING LOCATION OF ADJOINING TOMBS, FORMATION OF COURTYARD AND THE FOUR ESSENTIAL PLAN FEATURES OF THE MASTABA TOMB TYPE.



FIG. 4. TOMB OF PERNEB—VIEW OF COURTYARD, TOMB OF SHEPSESRE AT LEFT, DOOR TO SECONDARY OFFERING CHAMBER OPPOSITE, WINDOW LIGHTING STATUE CHAMBER TO RIGHT. PHOTOGRAPH MADE BEFORE REMOVAL TO THE METROPOLITAN MUSEUM.

ence has proved that, if the fibre of the stone is strong enough, the method to be preferred is that of immersing the blocks in water until the salts have been removed in solution, and thus the stone is freed of these destructive agents. * * * But this cannot be done without first subjecting the sculptured or painted surfaces to treatment which will enable them to withstand the action of the water during the long period that the block may be immersed. Our experiments on this side have produced very satisfactory results, and under ordinary conditions this process would have been employed in the case of Perneb's tomb. It was seen to be impossible, however, owing to the liberal use which has been made of plaster on the faces of the painted blocks, in order to fill out and conceal imperfections in the stone, over which the color had afterwards been applied. These blocks would have been injured by immersion, and so the exactly opposite process was adopted of treating the entire surfaces of the blocks in such a way as to 'bottle up' the salts and prevent the air from getting access to them."

Richard F. Bach.

Liverpool School of Architecture.

The School of Architecture at the University of Liverpool has received a gift equivalent to \$120,000 toward the erection of a new building devoted exclusively to its own purposes. The structure has been designed by Professor C. H. Reilly, long connected with the school and well known as one of the chief English exponents of the scholastic as opposed to the apprentice system of teaching as the more advantageous mode of preparation for professional practice. In this country the quarrel has never claimed much attention, nor assumed such great importance; we have accepted the school as the proper source of architectural knowledge and have relied upon a brief succeeding period of practical work to bring about the necessary adjustment between learning and mastery.

Professor Reilly's building will be a lasting monument of progress toward the establishment of this procedure in England; it represents the growing cult of architectural teaching.



COVER—DETAIL OF MRS. O. H. P. BELMONT'S TEA-HOUSE. Water Color by Hunt & Hunt.	Page
MRS. O. H. P. BELMONT'S TEA-HOUSE, NEWPORT, R. I. Hunt & Hunt, Architects. By DeWitt H. Fessenden	499
THE NEW YORK CITY HALL. Part III. The Work of Restoration - (Continued) By Charles C. May	513
OLD CHURCHES OF PANAMA. Drawings and Text by C. P. Kimball -	536
PORTFOLIO OF CURRENT ARCHITECTURE - - - -	551
THE ARCHITECT'S LIBRARY: Books on Colonial Architecture. Part III. Dwellings (Continued). By Richard F. Bach - - - -	568
NOTES AND COMMENTS - - - - -	576

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VIEW FROM LOGGIA—TEA-HOUSE OF MRS. O. H. P. BELMONT,
NEWPORT, R. I. HUNT & HUNT, ARCHITECTS.

THE ARCHITECTURAL RECORD

VOLUME XXXIX



NUMBER VI

JUNE, 1916

MRS. O. H. P. BELMONT'S TEA HOUSE
NEWPORT, R. I.

HUNT & HUNT, ARCHITECTS

By DEWITT H. FESSENDEN

IN a sense the architect is the most prescribed workman to be imagined. He has only a very few periods or orders among which to select and cannot by any force of genius invent a new one. Having selected an appropriate style, or undertaken one demanded by the client, he must then exercise such creative ability as he may have in order to impress his individuality upon the required task.

When Messrs. Hunt and Hunt set out to plan a Chinese tea-house in an American landscape, they were performing merely an exotic operation in total negation of any inventive or creative art. It is purely in the manner and spirit in which this Oriental fantasy has been carried to completion that we can estimate its value as an artistic product redounding to the credit of the architects.

In spite of Rudyard Kipling's famous dictum "that never the twain shall meet," there is a very distinct meeting of East

and West discernible upon a Newport bluff some fifty feet above the sea, where a most elaborate tea-house has been erected in true Oriental disguise upon Mrs. O. H. P. Belmont's estate, which bears the name of "Marble House."

This bizarre structure is in admirable keeping with its environment, the lines of the house conforming in exquisite harmony with the several contours of the property. It is this ability to design along the lines of nature which so distinguishes the true artist from the mere builder. In the present instance a striking composition has been realized, in which, as in a picture, this inspired tea-house takes its place aptly and artistically, approached from any angle. Only the closest and most intelligent study of the site could have brought about so satisfactory a solution of what was in fact a very puzzling task.

In looking over the plans it must be

conceded that in no single particular has the Chinese spirit been sacrificed to serve either a practical purpose or to win applause for some daring effect.

A waterway separates the tea-house from the main gardens, access to which is given by a typical Chinese bridge, slung high above and reflecting sharply in the stream below.

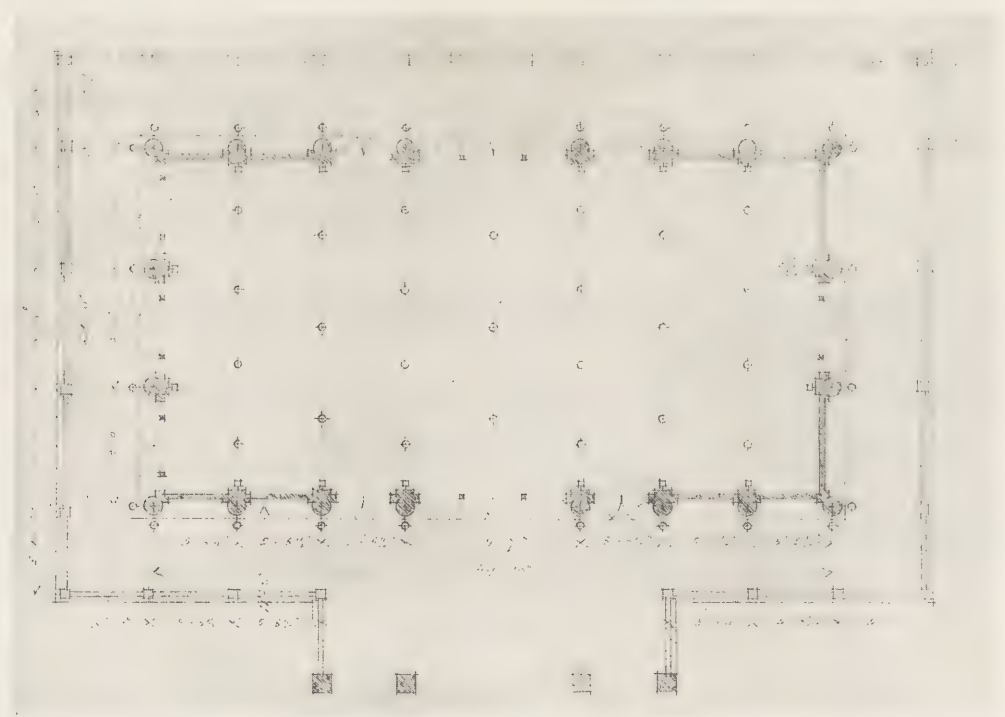
The grounds are laid out formally in triangular style, with shrubs and flowers to uphold the general scheme of decoration. At the apex of the triangle two Chinese flags float gaily in the breeze from suspended bars attached in true Chinese fashion to lofty masts.

Regarding the house from the grounds the visitor is at once pleasantly impressed with the genial color scheme shown in the green panels and lacquered relief work on beams and frieze, the blue tone of balustrade tiles, culminating in the brilliant green of the roof, which is the salient feature of the building. Massive but graceful, it seizes the attention by its splendid coloring and fine wood carv-

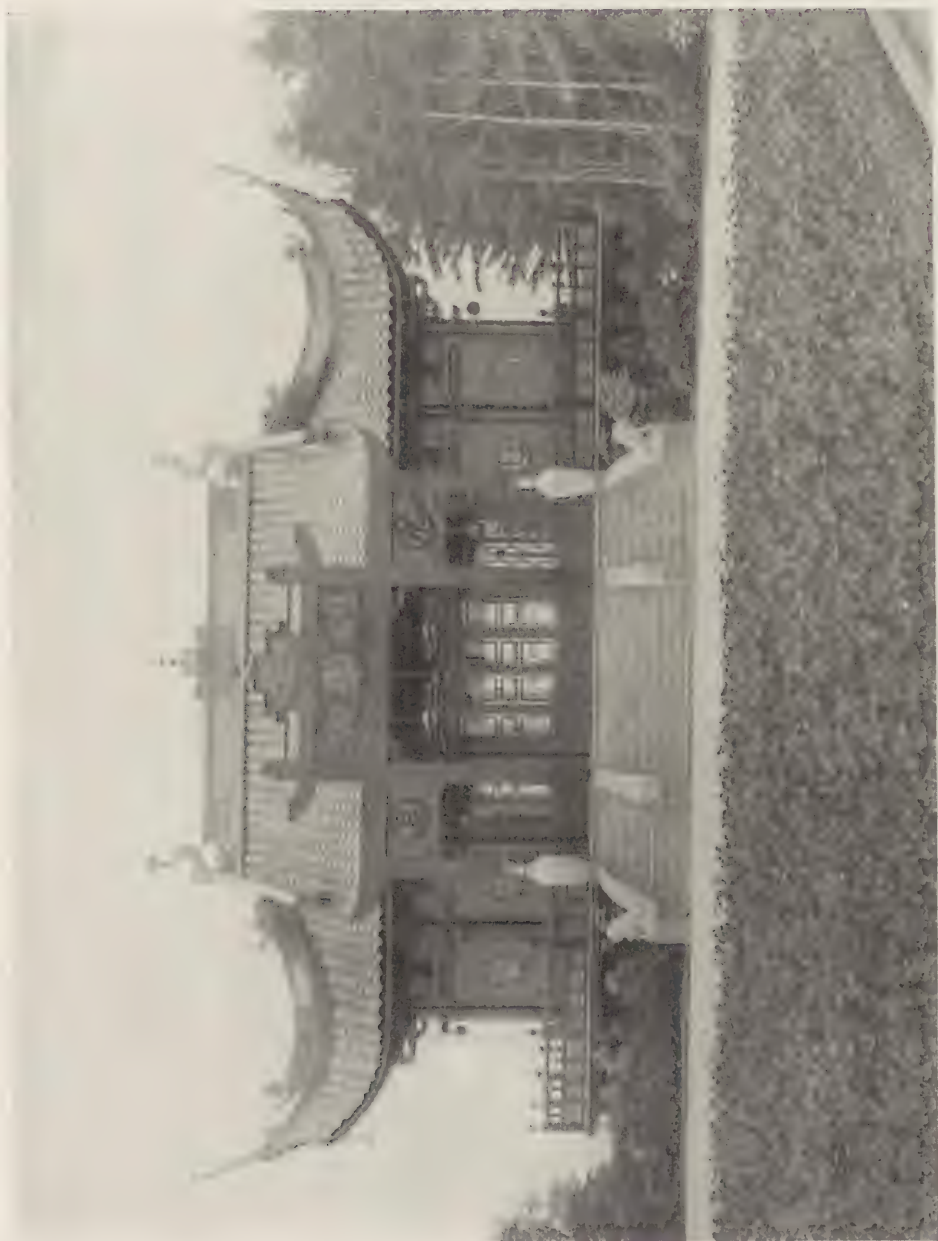
ing, the restful dragons on the crest, the finials and various embellishments upon eaves and tiles planned to lend variety and charm in a striking degree. The curve of the roof dates back in fancy to far distant times when tent dwellers were wont to catch up their canvas with supporting spears.

The approach to the main porch is by way of nine stone steps flanked by superb Kang Hee vases of powdered blue, boasting a stature of seven feet, in truth a pair of dignified sentinels.

Entering the door, the emotions are once more stirred by a perfect hurricane of color modified by the calm blue of sky and ocean, viewed beyond the windows; priceless rugs and vases assail the senses already steeped in nepenthic odors of cherry and iris which pervade the room. Lacquered woodwork and panelled walls contribute a further interest, the teakwood panels being appropriately painted in the flat two-dimensional decorative style, with which centuries of Chinese art have made us strangely familiar.



FLOOR PLAN—TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I.
Hunt & Hunt, Architects.



FRONT VIEW—TEA-HOUSE OF MRS. O. H. P. BEL-
MONT, NEWPORT, R. I. HUNT & HUNT, ARCHITECTS.



REAR VIEW—TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I. HUNT & HUNT, ARCHITECTS.



ENTRANCE TO TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I.
Hunt & Hunt, Architects.

The pilasters or structure members separating these panels have lacquered surfaces decorated with quaint Chinese quotations written in Chinese characters. It may be worth while to note a few of the more interesting examples, which are to be found in a manual by J. H. Stewart Lockhart.

A woman of strong character is said to be a hero among women.

Turning day into night means turning them topsy-turvy.

Women with pretty faces and fascinating manners really may overthrow cities.

Burning oil to prolong the day means labor day and night.

As for exaggerations of speech, they carry with them a cartload of demons.

Bewitching eyes are like the autumn waves.

The duration of one's life is fixed.

Happiness, long life, and health of body and mind are truly what all alike desire.

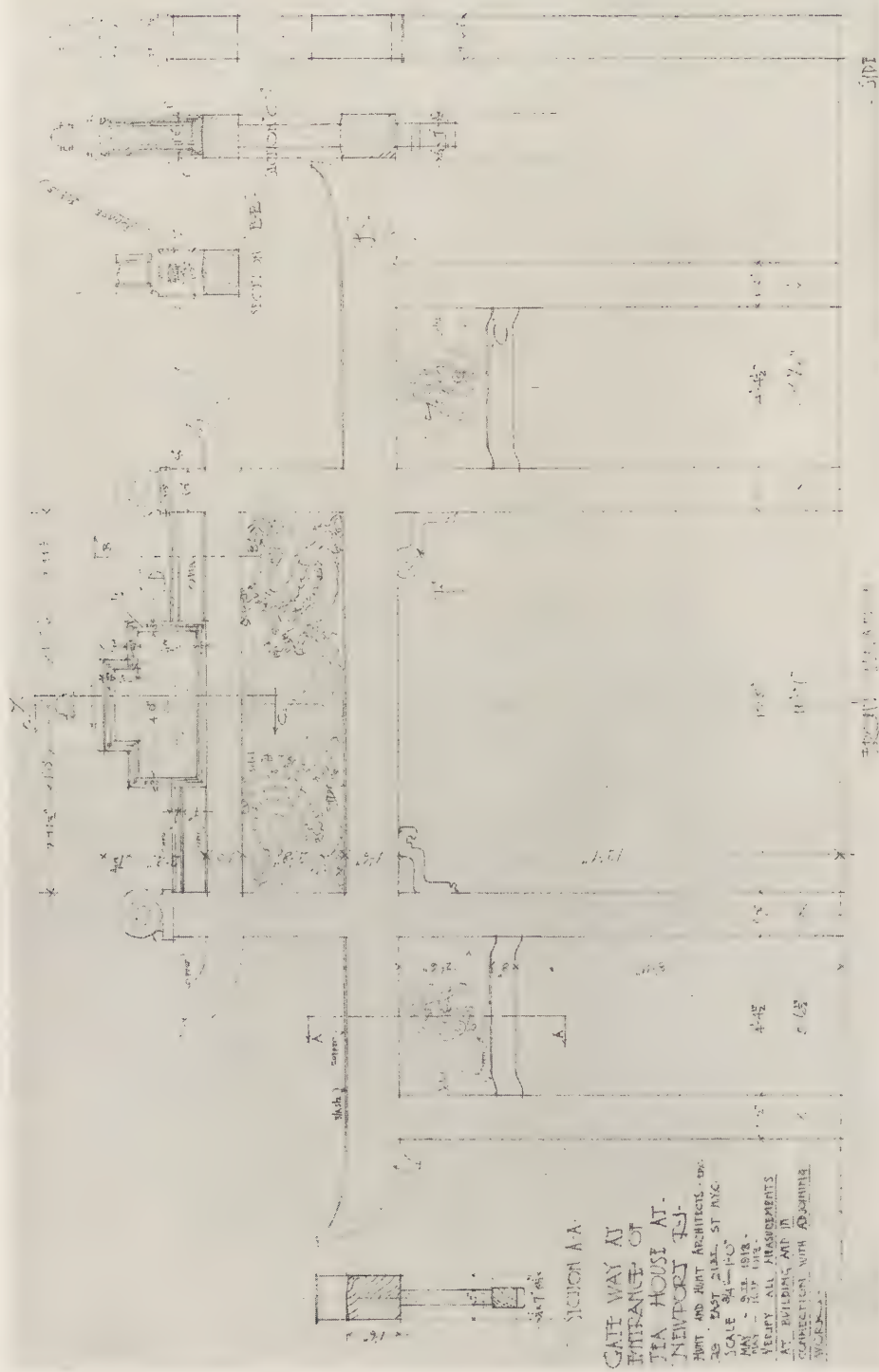
A multitude of evilly disposed people stir up strife, just as a crowd of mosquitoes can make a noise like thunder.

Many more proverbs attest the quaintness of the Oriental mind, as judged by a

foreigner, but enough have been cited for the purpose. Painted in orthodox Chinese fashion upon the inevitable lacquer, they enhance in unstinted measure the appearance of the room.

To the uninitiated a few remarks upon the lacquer work should be of significance. So important an item led to many plans and discussions between Mr. R. H. Hunt, Mr. William A. Mackay, the painter, and Mr. Langdon Valentine, the last named being an expert on varnishes. A main difficulty to be confronted was the ability to employ a lacquer fit to withstand such conditions of climate as this sea-flanked tea-house must necessarily be exposed to, and in the sequel it is interesting to observe that, so far as is known, this is the first instance of real Chinese lacquer work in American construction; and many months of anxious experimentation were consumed in the process. Mr. William A. Mackay conducted the experiments in Mr. Hunt's office.

Edward Dillon, M. A., in his essay on



SECTION A-A.

GATE WAY AT
ENTRANCE OF
TEA HOUSE AT
NEWPORT 43.
HUNT AND HUNT ARCHTDS. INC.
235 EAST 24th ST NYC.
SCALE 3/4" = 1'-0"
MAY - 22nd 1918.
VERY ALL MEASUREMENTS
AT BUILDING AND IN
CONNECTION WITH ADJACENT
WORK.

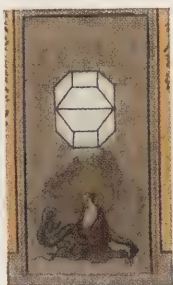
ENTRANCE GATEWAY-TEA HOUSE OF MRS. O. H. P.
BELMONT, NEWPORT, R. I. HUNT & HUNT, ARCHTDS.



A CHINESE RENDERING IN WATER-COLOR BY
RICHARD H. HUNT—MRS. O. H. P. BELMONT'S TEA-
HOUSE, NEWPORT, R. I. HUNT & HUNT, ARCHITECTS.



COLOR STUDY OF INTERIOR BY RICHARD H. HUNT
 —MRS. O. H. P. BELMONT'S TEA-HOUSE, NEWPORT,
 R. I. HUNT & HUNT, ARCHITECTS.



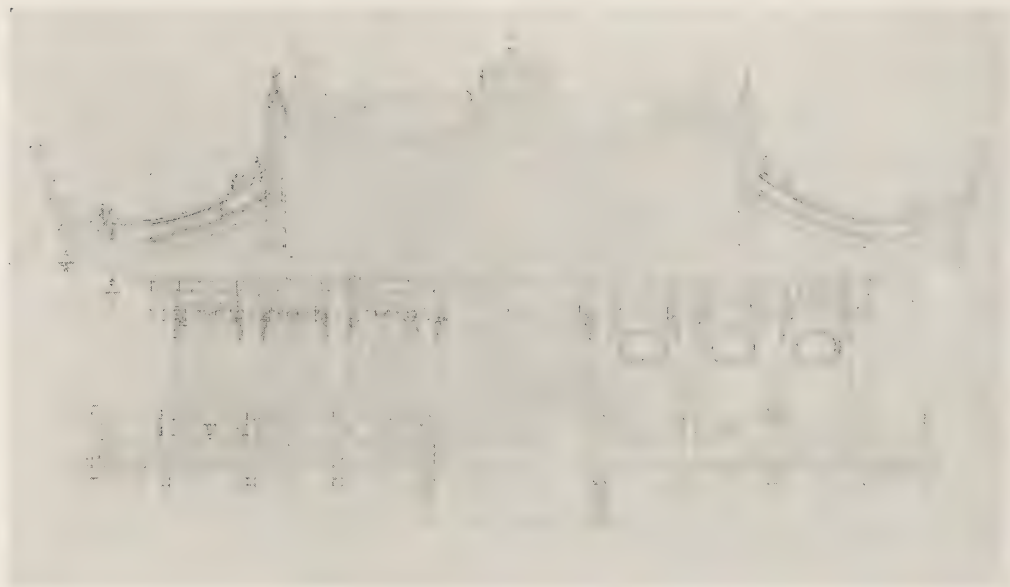
DESIGNS IN COLOR OF INTERIOR PANELS BY
RICHARD H. HUNT—MRS. O. H. P. BELMONT'S
TEA-HOUSE, NEWPORT, R. I. HUNT & HUNT,
ARCHITECTS.



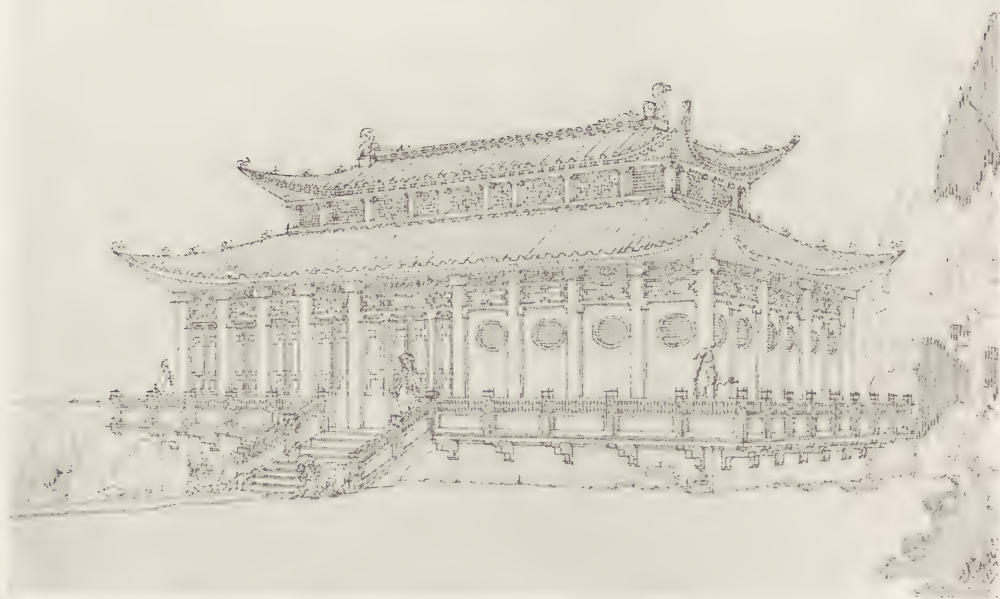
DESIGNS FOR FLAGS AND FLAGPOLES BY RICHARD H. HUNT—MRS O. H. P. BELMONT'S TEAHOUSE, NEWPORT, R. I. HUNT & HUNT, ARCHITECTS.



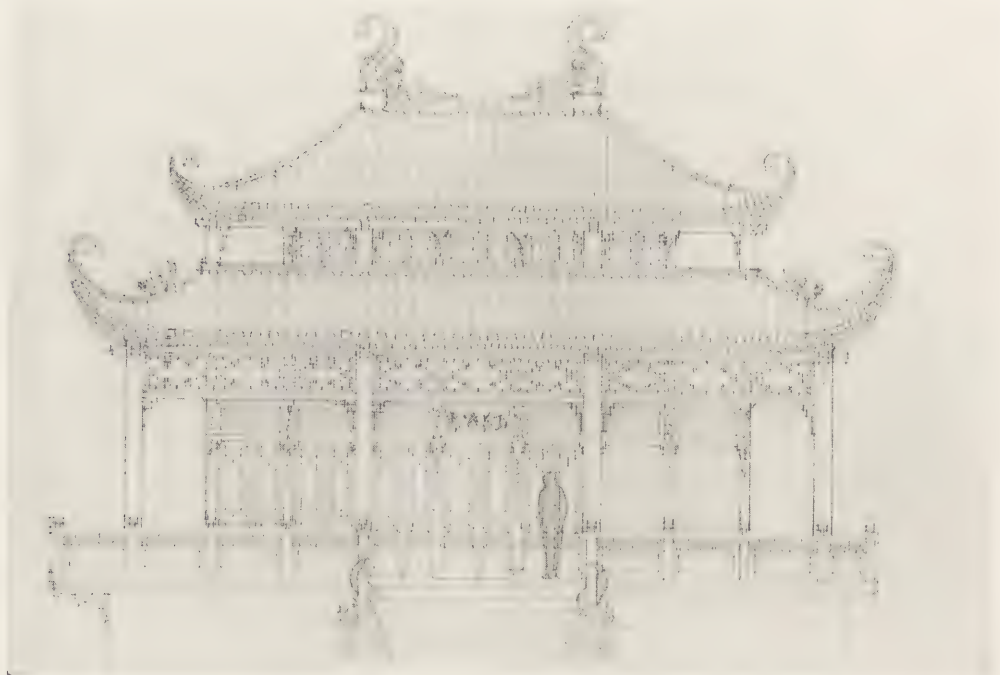
FINAL SCHEME—TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I.
Hunt & Hunt, Architects.



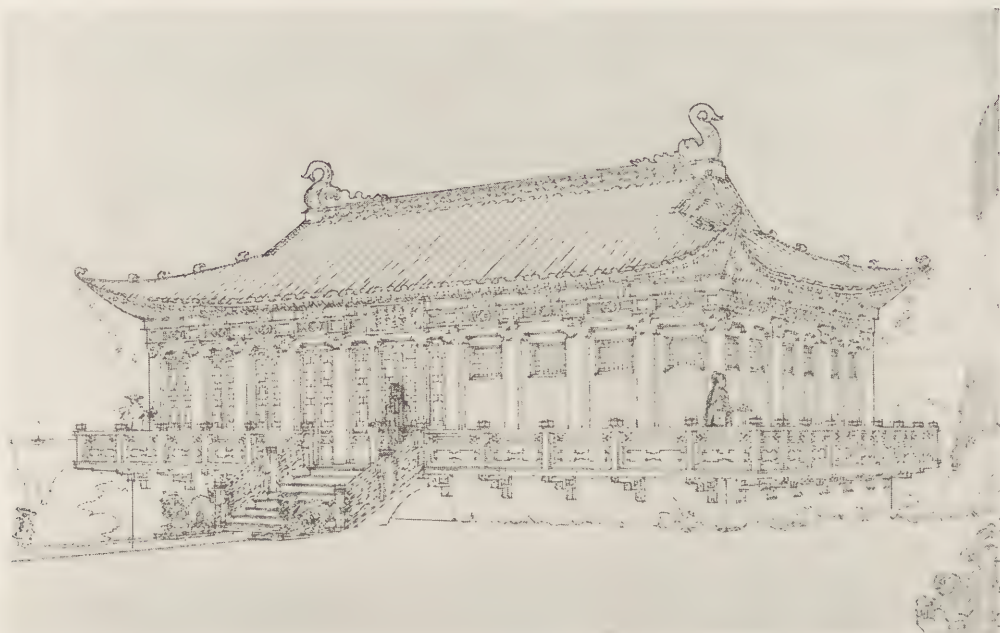
STUDY FOR TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I.
Hunt & Hunt, Architects.



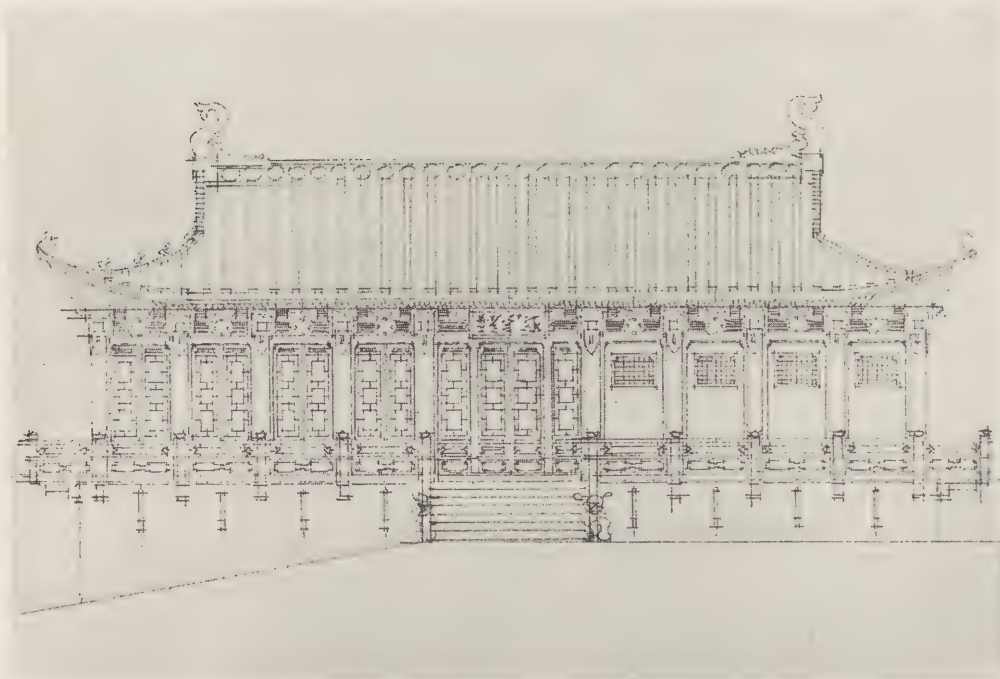
STUDY FOR TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I.
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STUDY FOR TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I.
Hunt & Hunt, Architects.

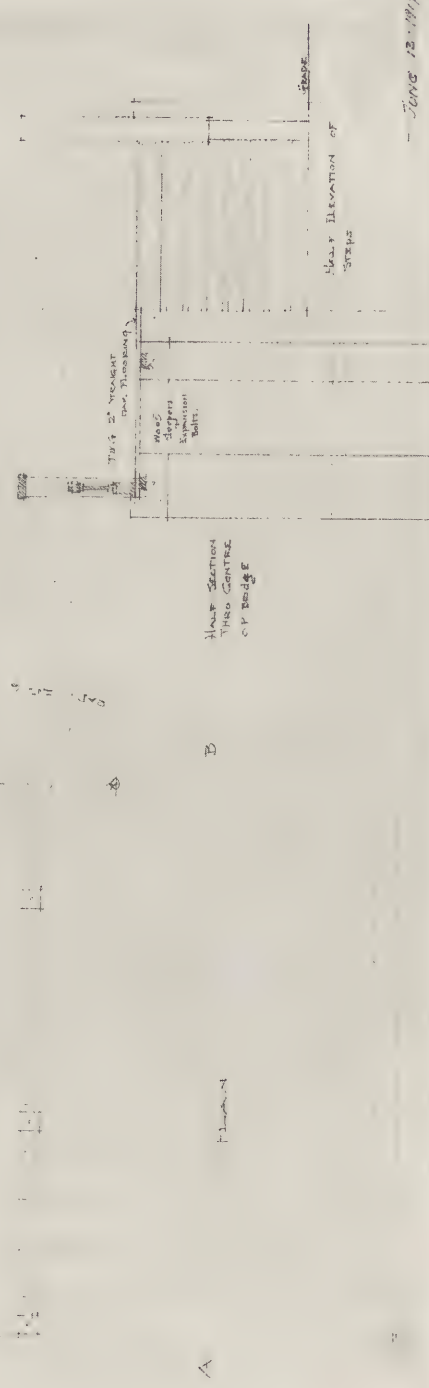
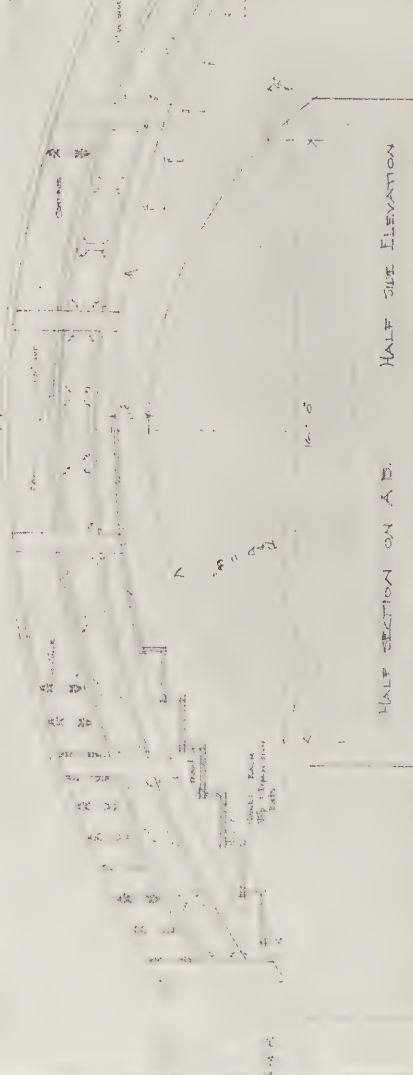


STUDY FOR TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I.
Hunt & Hunt, Architects.



STUDY FOR TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I.
Hunt & Hunt, Architects.

RACE TEA STREAM
 TEA HOUSE TERRACE
 JOE
 MRS O.H.P. BELMONT.
 NEWPORT, R.I.
 SCALE 3/4" = 1'-0"
 HUNTYHUNT
 ABOUT
 2' from the old path
 anchored in concrete
 stream at East End of bridge
 grade at West End of
 zone.



JUNE 13, 1914

PROPOSED BRIDGE OVER STREAM AT TER-
 RACE-TEA-HOUSE OF MRS. O. H. P. BELMONT,
 NEWPORT, R. I. HUNT & HUNT, ARCHITECTS.



CHINESE DOG—DETAIL OF FRIEZE IN TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I.
Hunt & Hunt, Architects.

Oriental art, traces the practice back to remotest times, when an official caste of court lacquerers plied their mystic craft in the imperial residences, a craft originating with the earliest builders and decorators of the Buddhist temples, many of the ancient statues today preserving intact their original coating of this imperishable material. The lacquer tree is to be met with generally in hilly regions, growing in clusters along the slopes. The trunk, when tapped, yields a copious sap of greyish tone, which blackens on exposure, becoming dry under chemical reaction.

When lacquering an object of art it is necessary to apply a great number of coats, possibly eight, and care must be taken that a coat is thoroughly dry before the application of a fresh one. All joints, knots and imperfections of grain are carefully coated with lute and rubbed smooth,

the surface being then covered with a special kind of fine hemp cloth. Having arrived at this stage, lutings of a mixture of rice paste and powdered porcelain are added to the lacquer, followed by more coats of pure lacquer, after which the surface is rubbed smooth with charcoal. As may be gathered, the process is exceedingly involved; and meticulous care has to be observed from start to finish. If genius is the capacity for taking infinite pains, the recorder should certainly acclaim the lacquerer and dower him with the posthumous fame.

When we remember that the climatic conditions hinted at above includes spells of fog, drops in temperature of many degrees below zero, with periods of intense heat supervening, it does not occur to one that any too much labor and forethought have been expended upon the materials employed.



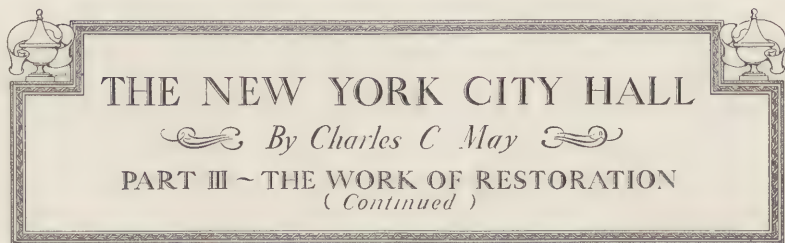
DETAIL—TEA-HOUSE OF MRS. O. H. P. BELMONT, NEWPORT, R. I.
Hunt & Hunt, Architects.

Before leaving the subject of lacquering, we might mention that the basis of the material is closely allied with that used by the Chinese, with the addition of fossil gums obtained by fossicking in the swamps of New Zealand, the object being to combine strength with elasticity.

The colors were carefully selected. A hard test had to be undergone by every color or combination of colors to make sure the sunlight would cause no change or disintegration. Red, blue, yellow, white and black were the pigments used. The interior was painted by glazes and on this work no direct compound was employed, one color being superimposed upon the other. The Chinese in glazing are concerned with the laws of light, not those of pigment, and in this fact lies the

great difference in color theory as observed in the East and in the West.

The panels have been painted in the manner of T'ang Dynasty panels, which to the Chinese mind are inseparably associated with poetry, painting and music, the four seasons often rendering the desired themes. The graphic quality of the paintings so thoroughly in accordance with true Chinese tradition has been superbly maintained, many months of loving labor being devoted to a successful achievement. The technique is oil mixed with turpentine to a thin solution to enable the wood grain to simmer through at will in the manner employed by the miniaturist, who permits one to see in places the delicate traceries of the ivory upon which he commits his portrait.



THE NEW YORK CITY HALL

By Charles C May

PART III ~ THE WORK OF RESTORATION

(Continued)

I N the spring of 1913 Mrs. Sage once more manifested her interest in the City Hall by proffering the sum of \$25,000 to be used in connection with an equal appropriation by the city for the renovation of the Rotunda and the dome. Much of the very finest work of McComb and Le Maire is concentrated about this stairway and gallery—exquisite detail in wood and stone that had for fifty years been lost in the gloomy half-light that found its way from the darkened eye of the dome.

As a basis for the study of this problem, McComb's drawings were embarrassing in their richness. This Rotunda, its colonnade, the sweep of the dome, and the surface decoration of the whole had been worked out with infinite care, sketch after sketch made only to be abandoned for another. Furthermore, there was not in those days the easy distinction between study and working drawing that would today differentiate them at a glance. In this case not even a marginal note in McComb's hand served to show which section, what diameter of opening, which type of balustrade, what form of decoration, whether coffer, rib, or panel, had been finally adopted and executed.

It was therefore only the piecing together of all available scraps of evidence, unifying them by general knowledge of McComb's sources of inspiration, that produced intelligent and generally satisfying results. That the present is not unlike the original aspect of the Rotunda may be judged from this description from 1829. "Round the top of the center staircase there is a circular gallery, railed in, likewise floored with marble, from which ten marble columns ascend to the ceiling, which here opens and displays a handsome paneled dome ornamented in great taste, with stucco, and giving light from the top to the interior of the build-

ing." The constriction of this opening, as we have noted, was one of the misfortunes consequent from the fire of '58; its re-enlargement by the addition of five feet to the diameter is one of the most beneficent details of restoration.

It is well, too, that the newly admitted light of day does not shine upon the various other unworthy elements that had somehow assumed a place for themselves within the dome—the ornate balustrade, debased in detail, that occurred above the colonnade; the gilded ornamentation of pedestals and the rosettes that accent the panels of the dome. All these, happily, have passed away. The new balustrade, of sturdier lines and simpler ornamentation, was developed straight from one of McComb's half-dozen sketches; the very beautiful rinceau of the frieze has been reproduced in precisely its original form, and other ornamented bands in this plaster cornice have been replaced where, like the rinceau, they were crumbled past the possibility of preservation. The marble columns and their capitals were, fortunately, in excellent condition; they called for treatment no more radical than that of soap and water and scrubbing brush.

Intimately connected with this sort of redemptive work and potentially even more vital to the well being of the building were the measures taken to reduce the fire hazard. We have seen how keenly alive were the city fathers to this risk even when the City Hall was first occupied. Their sons must have felt it indeed the irony of mischance that in '58 caused the fire to burn its fiercest in the very bell tower they had erected on the roof, as a fire alarm and protector, whose silence on that night was largely responsible for the heavy damage. No real lesson seems to have been learned, however, for in 1913

the roof space was still a litter of rubbish and a confusion of old and new roofs—the former telling in its blackened surface the narrowness of its escape, the latter quite unprotected and ready for its own turn. A voyage of exploration among the dark spaces behind the curve of the dome could only make one wonder at the good fortune that has allowed such masses of concentrated combustibles to pass unscathed through so many years.

To remove the fire hazard is not possible short of complete reconstruction of the interior. To reduce it in every practicable way has been the aim throughout recent alterations. In the unfinished attic, heavy brick walls equipped with fire doors serve to divide it into small compartments; in the third floor space around the Rotunda, many flimsy wooden partitions were removed; in both cases, masses of refuse having been cleared away, all remaining structural woodwork was treated with a heavy coating of fire resisting paint. The dome itself was backed up by a protective coating of cement and the inner corridor partition is entirely new and entirely fireproof. With all new partitions fire-stopped, all plaster on wire lath, with new and efficient systems of janitor and watchman service, one may feel that the humanly possible has been done to protect this priceless monument from its arch-enemy.

One of the most satisfactory among the minor pieces of work was the renovation of the Committee Room of the Board of Aldermen. Inherently a splendid room in situation, size and proportions, it had been cluttered with board partitions, telephone booths and what-not. With these excrescences removed, minor changes in the cornice and ceiling treatment, adequate and dignified lighting fixtures, this room has at once learned to carry itself with an aristocratic bearing that fairly puts to shame the large Aldermanic Chamber adjoining.

It was during Mayor Strong's administration that the pleasant room on the southwest corner of the first floor ceased to be the Mayor's Office (its title since the very first occupancy of the building), and became known and used as the Mayor's Reception Room. In starting a res-

toration here, there was much meaningless ornament, patently modern, to be removed, but there was much else—the cornice, door and window trim, and pediments that called only for the painstaking sort of treatment we have described. This room, latest among the notable restorations of individual "apartments" of the City Hall, decently curtained and furnished, receives delegations and contains legislative hearings in the quiet tones of dignity required of its position.

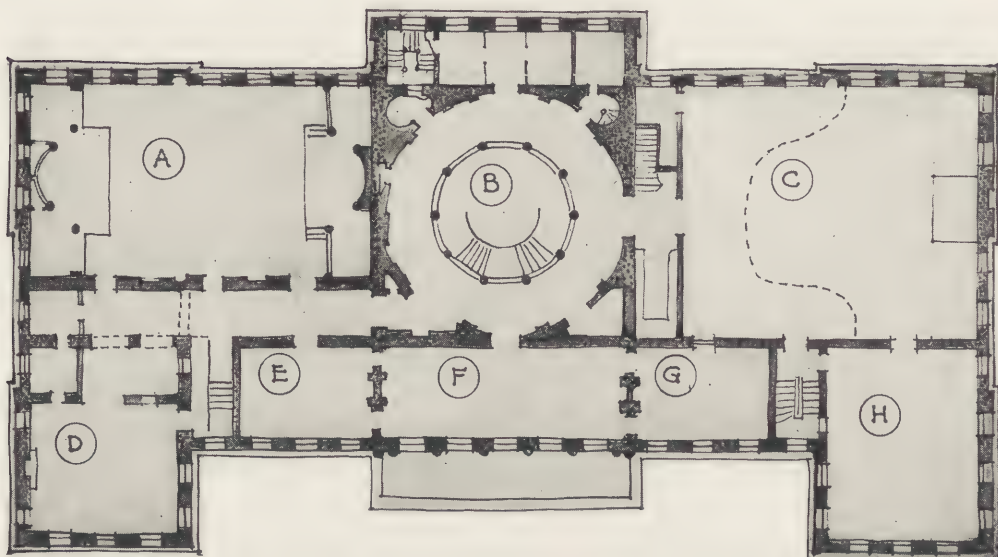
The two most recent operations, largest of all in superficial area, while they have each produced one room important in an architectural sense, yet have not included any restoration notable from the historical point of view. The earlier of these, finished at the beginning of 1914, provided adequate quarters for the President of the Board of Aldermen and his staff, as well as offices for the majority and minority party leaders; the later, completed only last August, remodeled completely the section of the first floor occupied by the Mayor and his forces. An inestimable service was rendered by the former operation in re-opening the main corridor to its complete length, doing away, we trust forever, with the dingy cul-de-sac that had previously terminated it on the east. The President's new office, although, as we say, not laying claim to such wealth of association as its neighbors, has yet taken its place beside them quite naturally, and with equal dignity.

The same is true of the Mayor's new private office. It is without direct lines of ancestry in an architectural sense, since we have yet to discover sketches, descriptions or documents bearing on a possible if doubtful treatment of the old Committee Room. Today it is still a small room, intimately paneled throughout its height, possessing that "reduced yet ample scale" admired by Henry James in the exterior. Here again we find in cornice and overmantel and frieze that sharply under-cut, staccato feeling in the ornament that brings into this northwestern room the sparkle of architectural sunlight.

During the span of nearly twenty years elapsed while these many physical changes had come to the City Hall, two other events had taken place—one of vital im-

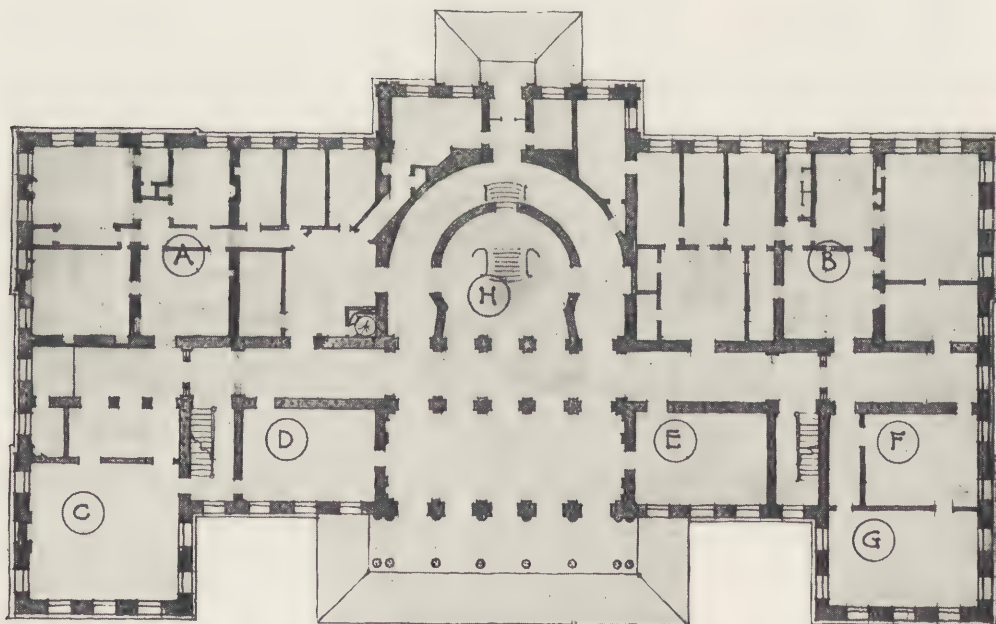


THE ROTUNDA—NEW YORK CITY HALL. GROSVENOR
ATTEBURY, ARCHITECT FOR THE RESTORATION.
JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



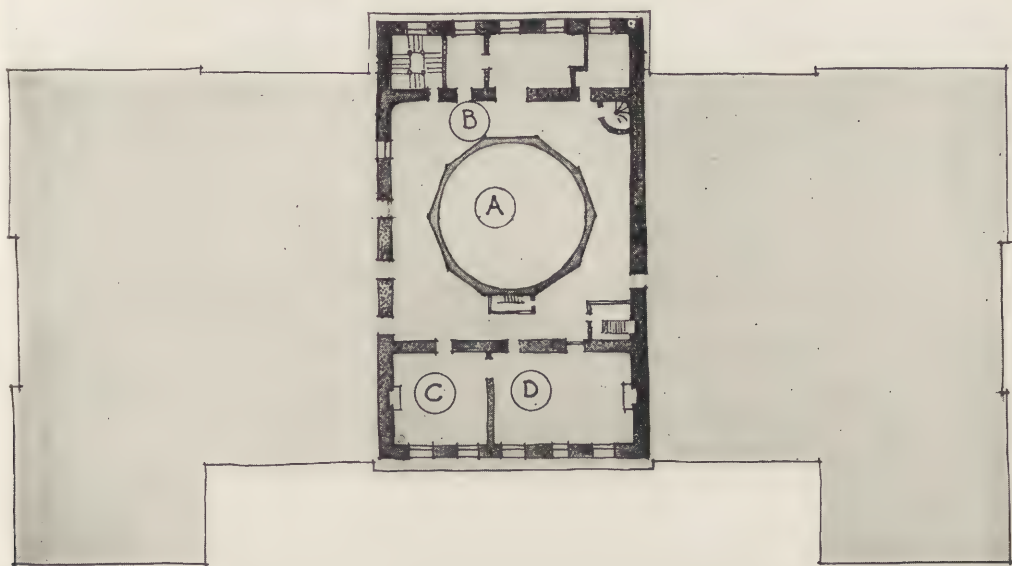
KEY PLAN OF SECOND STORY, NEW YORK CITY HALL.

A. Board of Estimate Room. B. Rotunda. C. Aldermanic Chamber. D. Committee Room. E, F and G. Governor's Suite. H. Aldermanic Committee Room.



KEY PLAN OF FIRST STORY, NEW YORK CITY HALL.

A. Offices of the Mayor and Staff. B. Offices of the President of the Board of Aldermen and Staff. C. Mayor's Reception Room. D. Mayor's Clerk. E. Reporters. F. Conference Room. G. Majority Leader of the Board of Aldermen. H. Rotunda.



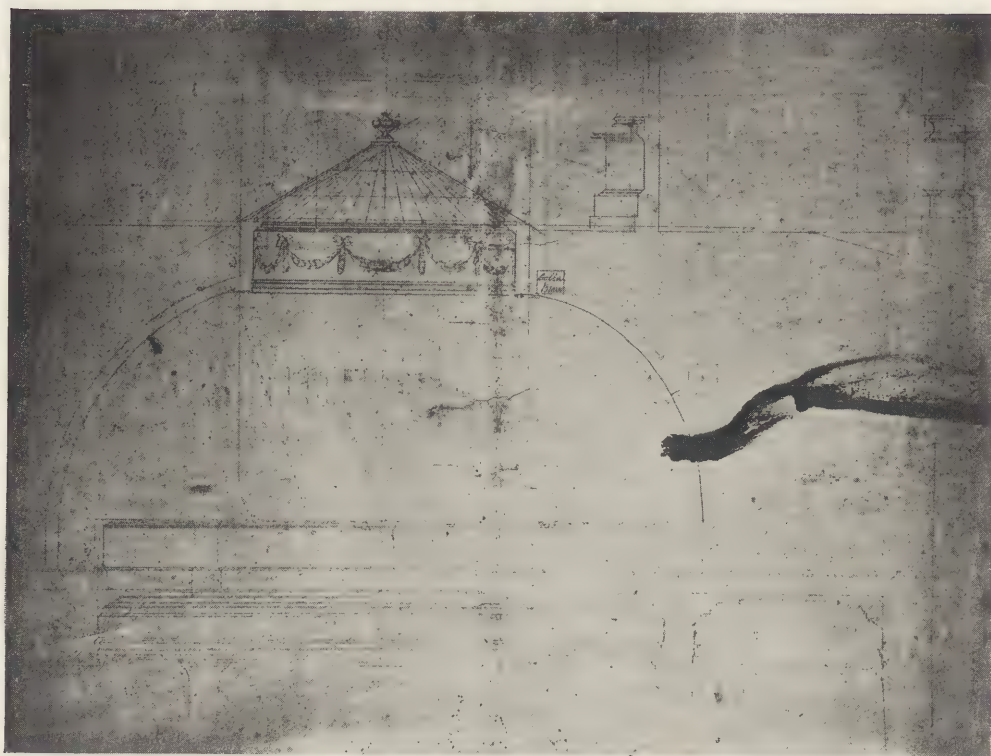
KEY PLAN OF THIRD STORY, NEW YORK CITY HALL.
A. Rotunda. B. Corridor. C and D. Offices of Art Commission.

portance to the city and to the City Hall, the other possessing the local interest that attaches to the passing of a tradition, however homely. By the former we mean the creation in 1898 of the Municipal Art Commission, a body whose work is so unobtrusive that many citizens forget it, so unadvertised and misunderstood that some benighted ones have attacked it, yet so salutary and vital to the aesthetic well being of New York that the city has already in a large way taken on a new and healthier aspect because of it. The restoration of the Governor's Room and all subsequent work of the sort has been directly and actively in charge of a sub-committee of this body composed of Messrs. I. N. Phelps Stokes, Francis C. Jones and R. T. Haines Halsey, their Chairman. These men have constantly shared with the architects the prolonged studies and responsibilities of restoration.

The other event was the discontinuance of the century old custom of resident housekeeper in the City Hall. It is here very properly linked with the Art Commission, because when it was proposed in 1913 to create adequate offices for the Commission in the third floor, the necessary preliminary was the banishment of the janitor. Naturally, there

were regrets at the abandonment of a tradition honored by a century of existence. Did not Mr. and Mrs. Skaats, the first housekeepers, make their entrance into the City Hall as early as the Mayor himself, and more permanently? We know that the Common Council held their custodian in high esteem, since they had decreed that neither Mrs. Skaats's Sabbaths nor her wash-days should be profaned by visitors to the City Hall. At other times she was always available within the prescribed hours, "to attend upon company that may choose to view the elegant apartments of the Governor's Room, Council Chamber, etc., and occasionally to ascend to the dome, from whence there is a delightful panoramic view of the city and harbor, with the adjacent country, that are seen to great advantage from this elevation, which may be estimated at 100 feet." "A small *douceur*," adds Goodrich, "is usually given to the person in attendance." Whatever its size, the "*douceur*" was doubtless earned, for the trip up the tortuous staircase that gave access to the cupola was Alpine in its difficulties of ascent.

The third floor vacated by the janitor, the area around the Rotunda was thrown wide open, and its walls now serve as hanging space for a most illuminating ex-



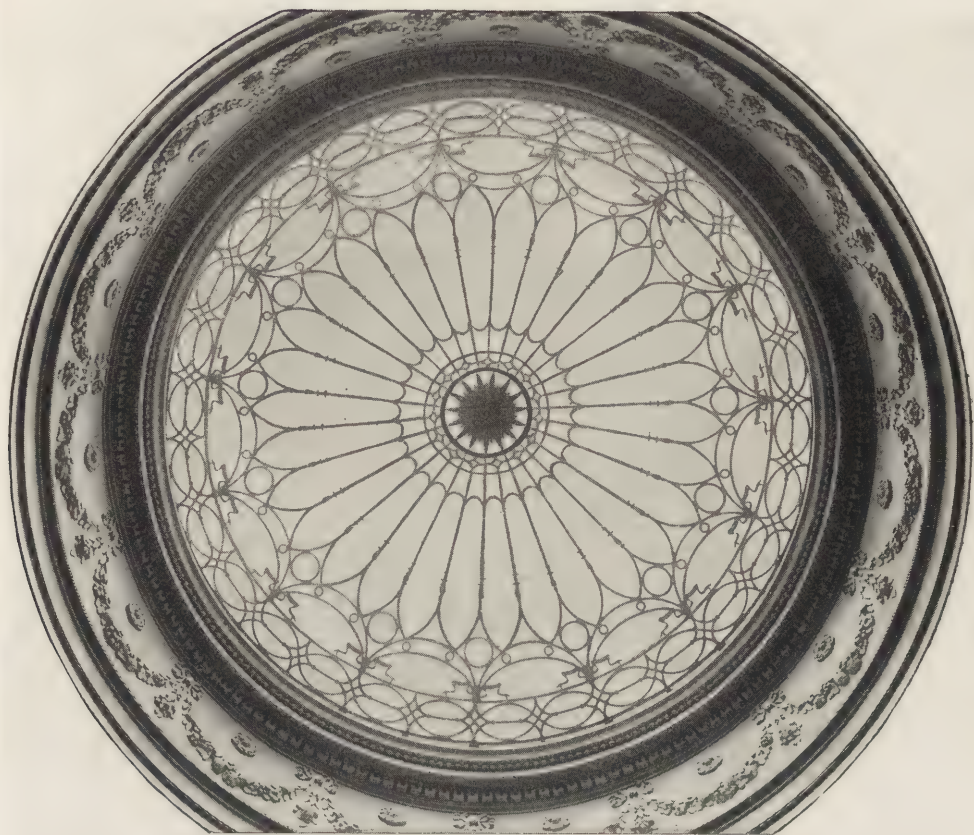
ONE OF McCOMB'S STUDIES FOR THE DOME—NEW YORK CITY HALL.

hibit of the work of the Art Commission. One cannot view this record of designs as submitted, disapproved, revised, re-submitted and finally executed without giving thanks not only for the blessings we own, but for the atrocities we have been spared. Along the south front of this attic story the Art Commission now holds title to its offices, the board room serving also as work room for the Commission's Secretary, Mr. John Quincy Adams. This room as remodeled by the city and furnished through the generosity of the Commission's President, Mr. R. W. de Forest, presents an appearance more thoroughly in accord with the period of the building itself than any apartment in the City Hall. A visit would be repaid even were access possible only by way of the old spiral stairs; since 1913, however, this adventure has been made gratuitous by a new stairway more adequate to its purpose.

From the first of the later restorations, the architects have felt the danger that

though the building were restored from end to end, the work would still fall short of real success if it failed to imbue each apartment with the spirit of its own day. Consider the Governor's Room, for instance, without its Washington desk, its hob grates, its awkward high-backed sofas. Is it not these elements equally with its architecture and its portraits that create the atmosphere manifest to any sensitive visitor? So, through these later restorations, a serious effort has been made to utilize the element of furnishing to produce those most elusive qualities that help to make up a total fitness of things.

Much thought, we know, was given to the furnishing of the City Hall in the first instance, not only as concerns floor covering and furniture, but the embellishment of walls with portraits. We have the early city fathers to thank for the collection of Trumbulls that now fills the walls of the Governor's Room. The collection was well under way in 1824 when



THE EYE OF THE DOME AS ENLARGED. VIEW FROM DIRECTLY BENEATH—NEW YORK CITY HALL.

Grosvenor Atterbury, Architect for the Restoration. John Tompkins and Stowe Phelps, Associated.

the Common Council besought Lafayette that he "be pleased to sit for his portrait, to be placed either in this room" (the Council Chamber) "or in the gallery of portraits in the City Hall. This room [they said] in which we meet to transact the municipal concerns of this city, is graced with the full length portraits of a Washington, a Clinton, a Jay and a Hamilton—individuals who have established a name which will be transmitted to future generations. The Portrait Room in our Hall is embellished with the portraits of many of our most distinguished citizens, civil, military, and naval." Coming to the peroration, they proceed: there is "no individual now living whose portrait will be viewed with greater admiration and interest than that of our illustrious visitor, General Lafayette." The result of this address and its gracious acceptance was the fine full length by Morse

that hangs as an over-mantel in the Mayor's Reception Room.

In the matter of certain, at least, of their floor coverings the Council displayed a spirit of economy to the *nth* power. They resolved "to employ the convicts in the Bridewell in constructing matting to cover that part of the floor in the Court of Sessions occupied by the Audience," as well as "that part of said room occupied by the Court and the Gentlemen of the Bar." More attractive in its mental suggestion is the discovery by a member that "a set of tapestry had been lately imported into this country which would be highly ornamental in furnishing some of the apartments in the New City Hall." Further than this we are told only that the furnishing committee was authorized to make the purchase "if in their opinion suitable."

In the case of the Governor's Room we



THE ROTUNDA—NEW YORK CITY HALL. GROSVENOR
ATTERBURY, ARCHITECT FOR THE RESTORATION.
JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



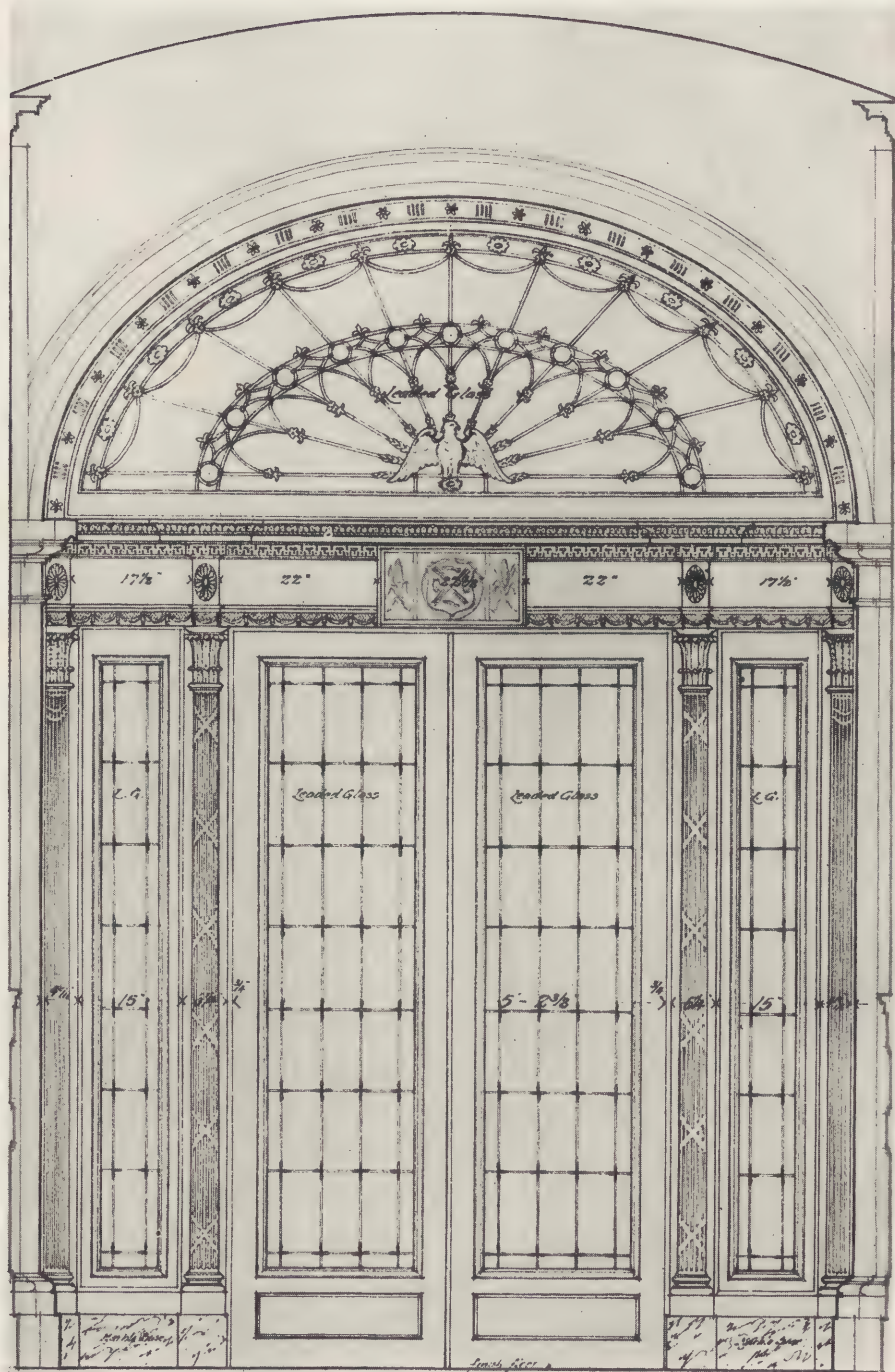
MAYOR'S RECEPTION ROOM—NEW YORK CITY HALL.
GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORA-
TION. JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



SOUTH ELEVATION OF OFFICE OF THE PRESIDENT OF
THE BOARD OF ALDERMEN—NEW YORK CITY HALL.
GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORA-
TION. JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



OFFICE OF THE PRESIDENT OF THE BOARD OF ALDERMEN—NEW YORK CITY HALL. GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORATION. JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



DETAIL FOR SCREENS IN MAIN CORRIDOR—NEW YORK CITY HALL. GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORATION. JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



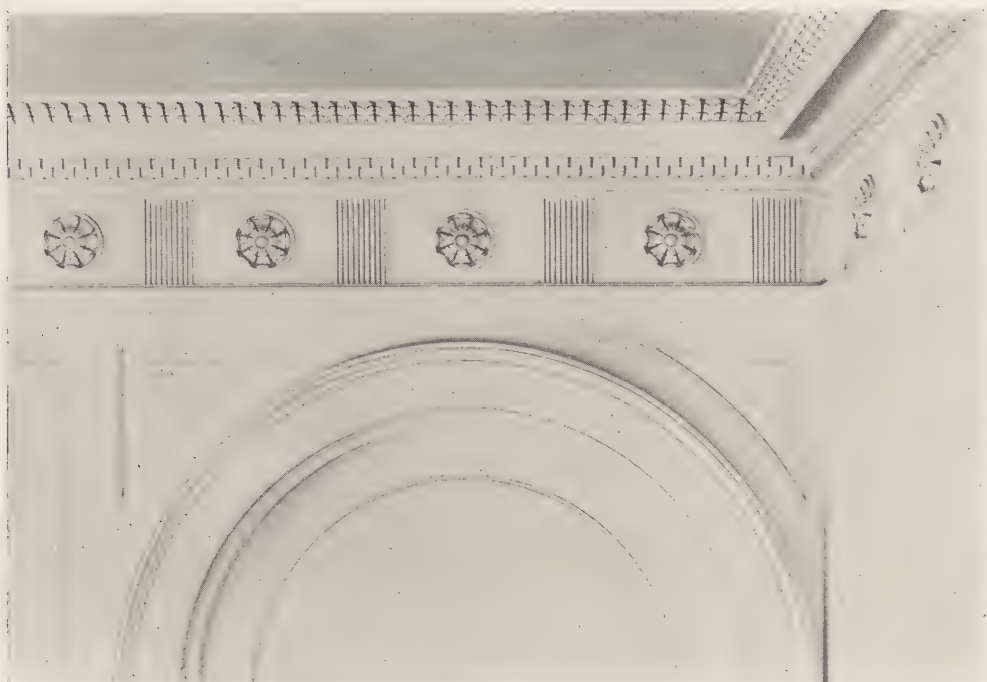
SCREEN AT EAST END OF MAIN CORRIDOR—NEW YORK CITY HALL. GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORATION. JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



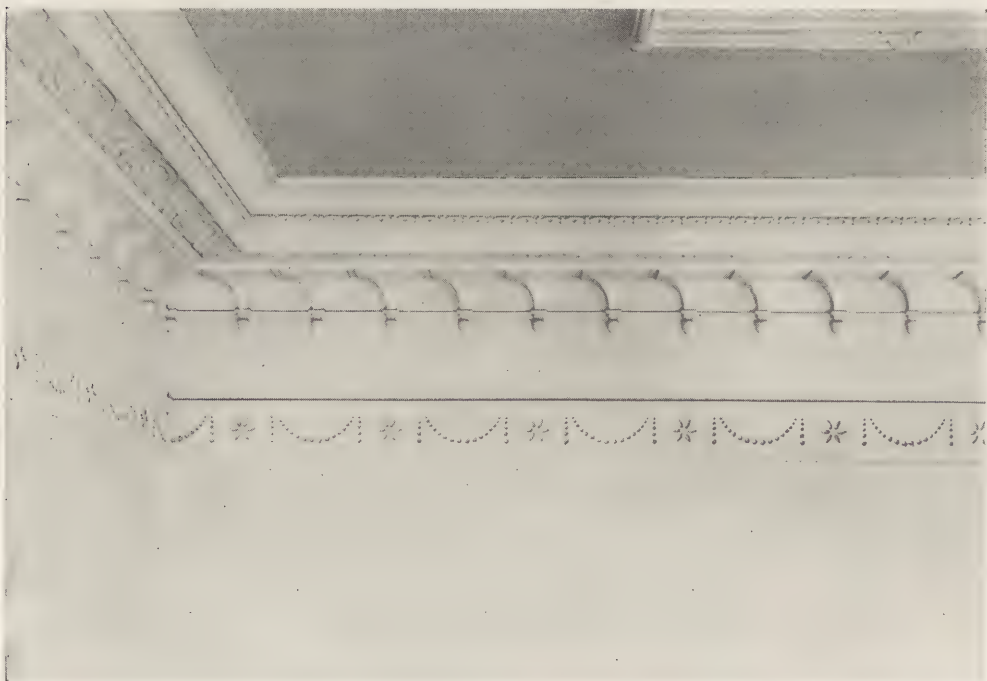
SCREEN AT WEST END OF MAIN CORRIDOR—NEW YORK CITY HALL. GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORATION. JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



MAYOR'S PRIVATE OFFICE—NEW YORK CITY HALL.
GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORA-
TION. JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



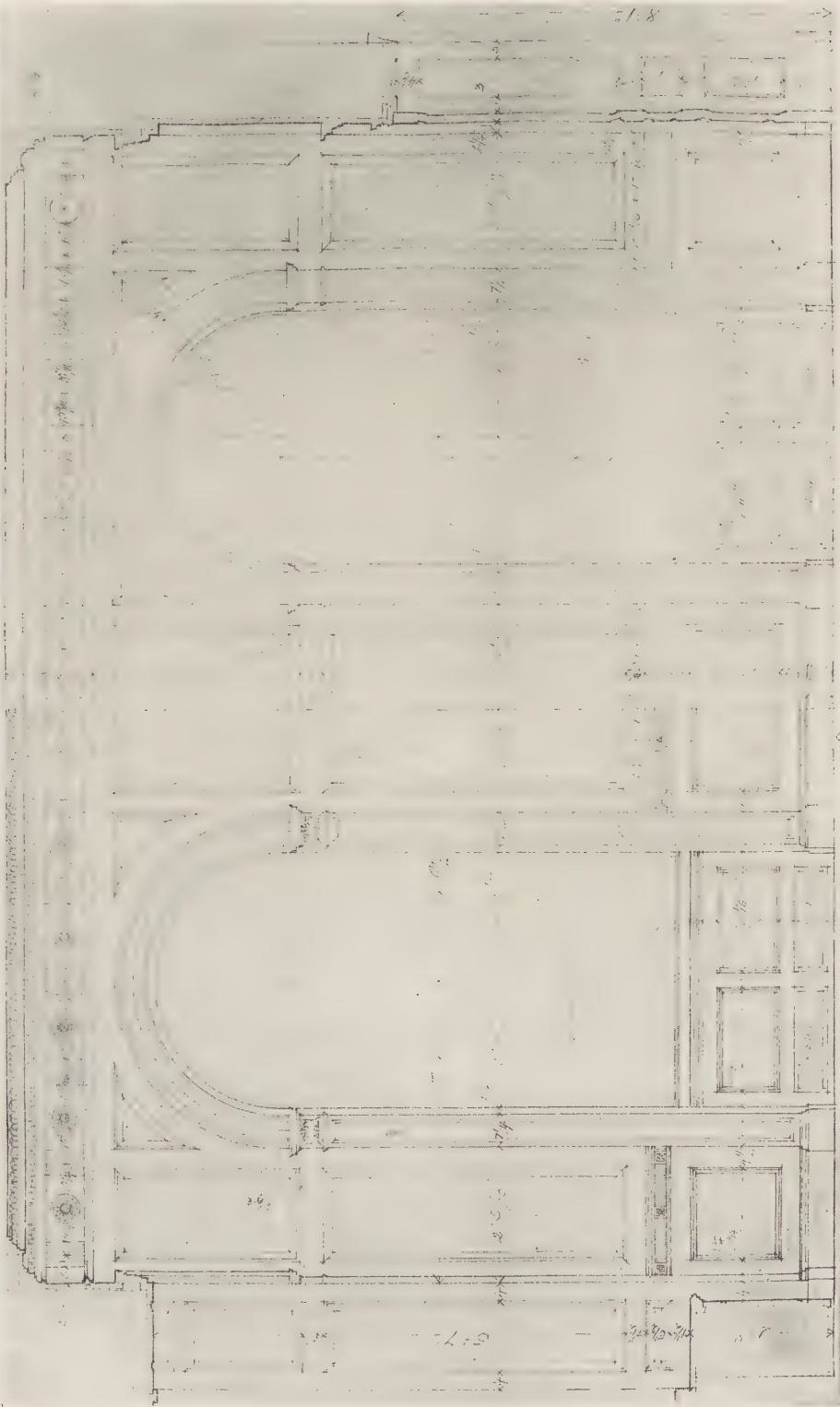
CORNICE IN MAYOR'S OFFICE—NEW YORK CITY HALL.
Grosvenor Atterbury, Architect for the Restoration. John Tompkins and Stowe Phelps, Associated.



CORNICE IN OFFICE OF THE PRESIDENT OF THE BOARD OF ALDERMEN—NEW YORK CITY HALL.
Grosvenor Atterbury, Architect for the Restoration. John Tompkins and Stowe Phelps, Associated.



DETAIL OF MANTEL IN MAYOR'S OFFICE—NEW YORK CITY HALL. GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORATION. JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



NORTH ELEVATION OF MAYOR'S PRIVATE OFFICE-NEW YORK CITY HALL. GROSVENOR ATTERBURY, ARCHITECT FOR THE RESTORATION. JOHN TOMPKINS AND STOWE PHELPS, ASSOCIATED.



DETAIL OF BALUSTRADE ABOVE ROOF, SHOWING PREVAILING CONDITION OF MARBLE—NEW YORK CITY HALL.



DETAIL AT PORTICO—NEW YORK CITY HALL. COMPARE THE DETAILS OF THE OUTER COLUMN CAPITALS WITH THOSE THAT HAVE BEEN PROTECTED BY THE ROOF.



DETAIL OF SOUTH FRONT—NEW YORK CITY HALL.
NOTE CONDITION OF MAIN CORNICE AND MODILLIONS.



DETAIL OF BALUSTERS—NEW YORK CITY HALL. THE MEREST PRESSURE WOULD BREAK OFF ANY OF THE NECK MOULDINGS AS IT HAS DONE IN THE CASE SHOWN.

know something of the cost, if not the style, of the furnishings. Following a resolution by the State legislature advancing money for the purpose, "not exceeding one thousand dollars," the Common Council appropriated a like amount and, to quote from a pamphlet issued by the Art Commission, "the records show expenditures for carpets and curtains, but the remaining furnishings appear to have been those which were brought from Federal Hall."

The newly restored rooms cannot be filled with antiques, each one verified as to pedigree and placing. What can be done, however, is to see to it that in replacing worn out furniture of stock pattern, and in purchasing new articles as such purchases become necessary, the new be chosen always with a view to its singing in the same key with the building itself. Among McComb's contemporaries

were numbered cabinet-makers and clock-makers whose productions were worthy and sincere. The last of the originals of their handiwork are now being ferreted out by the collectors. But the City Hall is forming gradually a collection of its own—splendidly executed reproductions which have in themselves and lend to the rooms the quality of one hundred years ago.

Thus the committees of the Board of Estimate will henceforth meet around a conference table which has for its prototype the dining tables made by Duncan Phyfe about 1800; they will sit in chairs after the same master; Mayor Mitchell reads the hour from a banjo wall clock by one of the brothers Willard; his secretary's office boasts an Eli Terry; many portraits have been rescued from frames of a debased pattern to be replaced in reproductions of the beautifully designed and executed frames by Le Maire.

And now, strangely enough, it seems, with nearly all the "apartments" of our City Hall restored to their original "elegance," we find that the restoration most sorely needed is yet to be made. We have saved those portions of the interior which the hand of time was using more gently; we have raised barriers in some degree against the dreaded fire; but where time and frost are merciless, where storms beat most relentlessly—what have we done to preserve those delicately carved capitals, refined modillions, the fragile projections of balusters and volutes and cornices? To have done nothing would be shameful—what we have done is criminal! Surely no desecration that has attacked the interior can equal the deliberate savagery of a sand-blast over these lovely marble surfaces. The dusty coating of a hundred years has been lost, not to be replaced; but consider that this coating was also a protective cloak to shed the rains and repel the frost. Now the storm beats directly upon a new, tender surface that in its turn is being crumbled and destroyed.

A distinct shock awaits anyone who examines the condition of the exterior marble of the City Hall. The balustrade above the roof, most exposed to action of the elements, has naturally suffered most.

Indeed, that along the north side has already been replaced in artificial stone—itsself in sad disrepair. On the east front a baluster has fallen out, a half dozen others have no trace left of the neck moulding; the curved shafts of the balusters are grievously spalled and mutilated; hardly a moulding of the pedestals and coping is recognizable. The same is true in only less degree of the railing that crowns the entrance portico. In fact, it is not too much to say that practically all the delicately moulded and carved marble is already seriously deteriorated; it presents a pulverized surface which rubs off beneath the finger; mouldings a half-inch thick fall at a touch.

The sand-blast will never again be perpetrated—of that we may be certain. But

our responsibility will be equally heavy if we do not bestir ourselves to preserve the priceless remnant. One looks on with dread as the stringing of lights for each succeeding municipal celebration takes its toll of mutilated marble—a moulding here, the leaf of a capital there. Each bit of carving that falls can never be replaced; each winter that passes takes with it something irreparable; each month leaves something less of the City Hall than graced the month before. Our own age builds more quickly than McComb's—but not more sincerely; our age builds higher—but not more beautifully. Surely in this can we honor our fathers, that we reverence the work of their hands, and preserve intact our inheritance.



THE CUPOLA, AS REBUILT
AFTER THE FIRE OF 1858.



CHURCH OF LA MERCEDES, PANAMA CITY.

OLD CHVRCHES OF PANAMA

Drawings and Text
By C. P. Kimball

THE destruction of old Panama by Morgan, the buccaneer, in 1671 was so complete that the Spanish Crown ordered the new city to be built five miles up the coast; and in 1672 the work of rebuilding was commenced. Of the old city very little remains except the tower and ruined walls of the Cathedral.

The site chosen was a promontory, much healthier than the old location, and could be more easily defended. No ships could approach close to the city because of shoal water.

On the water side a sea wall was built, with turrets at intervals, and this wall was continued across the narrow neck of land; beyond it was a deep moat. Access to the city was by draw-bridge and gate.

Portions of this land wall and moat can still be seen, although the city long ago outgrew the limit set by this boundary; we now find houses built upon its top with walls rising sheer from its face. Through an archway one suddenly comes upon such a view as this—a courtyard surrounded by buildings. Before us rises the old city wall with houses built on it, and at a lower level we find a terrace, with houses and plants set off with an iron railing and urn-topped posts.

As wood had proved such a factor in the destruction of the older city by fire, it was ordered that all buildings in the new city should be of stone or brick. Thus we find the Cathedral and other city churches with massive walls of brick and stone, the exterior surface being plastered with cement. The roofs were covered with tiles which through the centuries have accumulated moss and plant growth. In recent years many of the tile roofs have been replaced by coverings of corrugated iron.

The Cathedral was of course the principal building of the city; and as such it occupied the post of honor, facing the central plaza with its royal palms and other tropical trees and its wealth of flowers and foliage.

Of the typical Spanish architecture of the time, it stands a monument to the faithful work of the old Spanish artists and artisans. Educated in the mother country, these masters in art have left their imprint on the old monuments to Catholicism throughout the former Spanish South American colonies, from Mexico and the Isthmus, on the north, to the extreme southern portion of the American Continent.

The façade of the Cathedral, between the two flanking towers, was faced with stone of a bluish gray color, the rest of the walls being of stone and brick with plastered surfaces. The various niches contain carved figures of wood.

The two belfry towers have spires whose surface slopes are studded with clam shells, set into the cement in geometrical patterns, which glisten brightly in the bright tropical sunshine.

Old San Felipe bears the date of 1689 and is said to be the oldest church in the city. The entrance façade, although somewhat spoiled by recent restoration, is very interesting. The carved figure over the main entrance is of wood. The walled-in garden courtyard on a side street, which is the only place from which the church tower can be seen, is typically Spanish with its banana trees, palms and flowers, and arched cloister beyond.

Nearby, fronting the plaza of the same name, is San Francisco Church with its ornate façade and severely plain belfry tower on the corner. The rear of this church is built on the sea wall. Extend-



THE CATHEDRAL, PANAMA CITY.



CHURCH OF SAN FELIPE, PANAMA CITY.



CHURCH OF SAN FRANCISCO, PANAMA CITY.



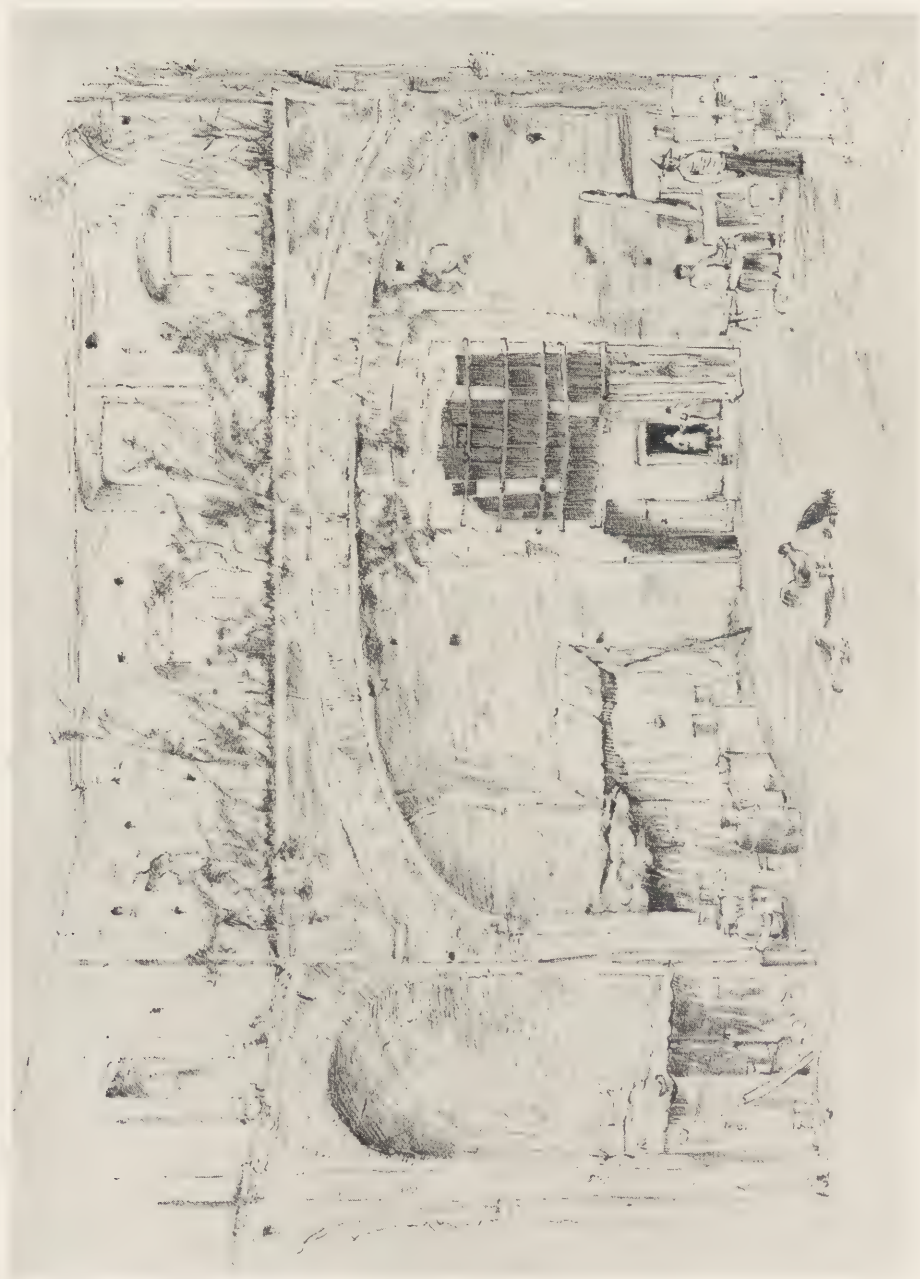
REAR VIEW—CHURCH OF SAN FRANCISCO, PANAMA CITY.



CHURCH OF SAN JOSE, PANAMA CITY.



ENTRANCE TO JESUIT MISSION, PANAMA
CITY. BUILT 1739. NOW DEMOLISHED.



THE FLAT ARCH—CHURCH OF SAN DOMINGO.



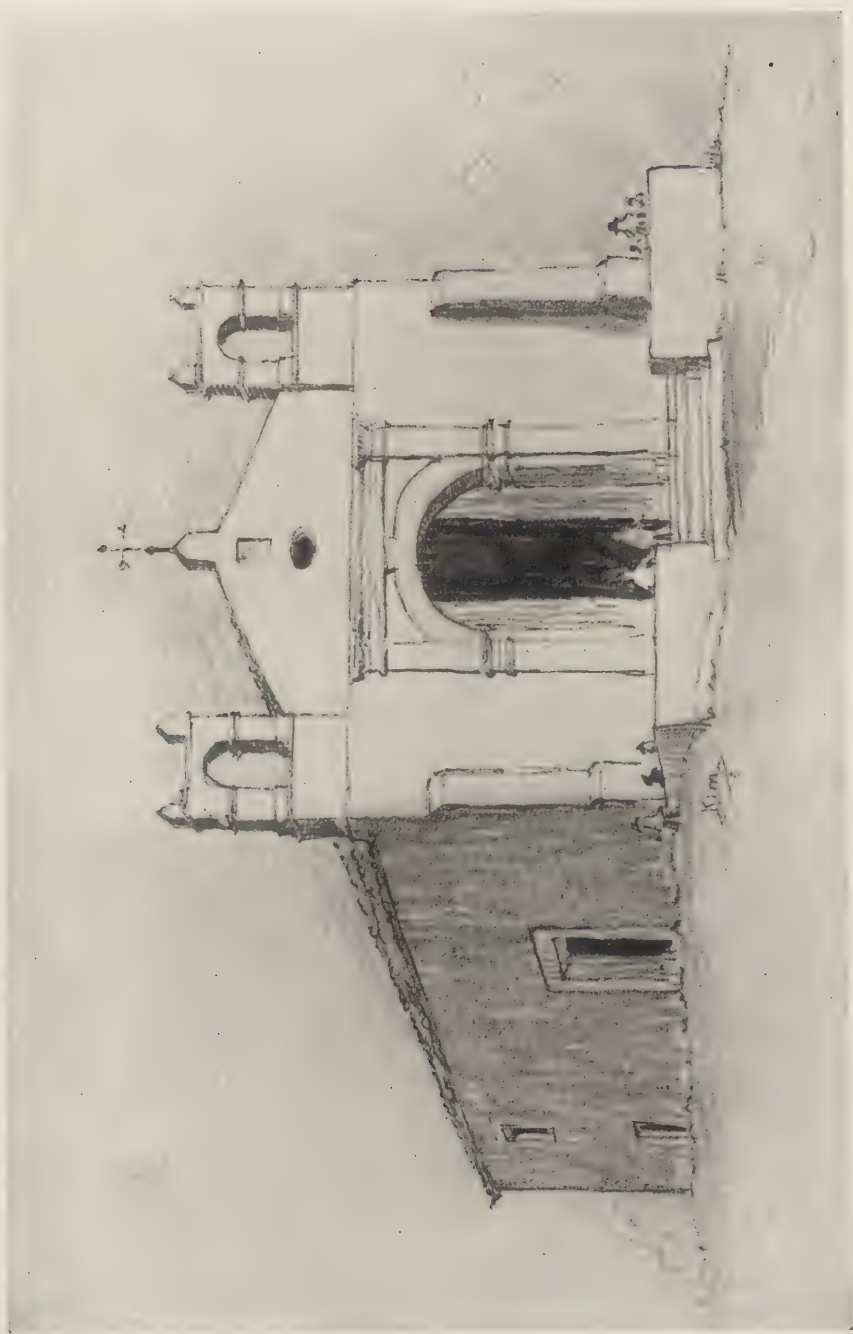
CHURCH OF SAN DOMINGO, PANAMA CITY.



SAN MIGUEL, PEARL ISLANDS



SABOGA, PEARL ISLANDS.



SUBURBAN CHURCH, PANAMA CITY.



CHURCH AND SCHOOL HOUSE, ARRAJAN, PANAMA.



VILLAGE CHURCH, TABOGA ISLAND, PANAMA.



ENTRANCE TO CHURCH OF SAN FELIPE.

ing to the left is a long two-storied building with arched balcony looking out on a courtyard on the city side and windows opening seaward at the rear.

La Mercedes Church, like the Cathedral, is faced with stone between the two flanking towers. These towers terminate above the belfry, however, in domes instead of spires. An interesting domed altar chapel stands close to the street at the corner of the main building, and balancing the front in the opposite corner is a domed vault.

San José is a small single-towered church and stands near Herrera Plaza.

The beautifully proportioned entrance to the Jesuit College buildings bore the date of 1739 and was executed in stone. At the time this sketch was made (1905) the buildings were roofless and in ruins. The entrance and most of the walls have since been demolished.

Old San Domingo Church, built entirely of brick, has long been a ruin, only the walls and arches remaining. A few

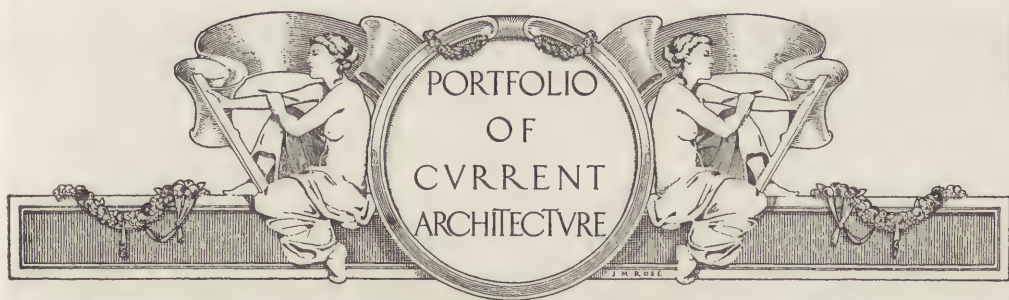
years ago when the site was coveted for an apartment building, the old flat arch was saved for sentimental reasons and with the front wall still stands.

This old arch with a span of thirty-seven feet and a rise of seven feet nine inches, built of brick and cement, stands as a tribute to the skill of the old Spanish artisans of the seventeenth century. The story of its construction is told in the Isthmus as follows: It had been twice built only to collapse; the third time the forms were removed the architect took a position directly beneath it, calling on God to crown his work with success, and the arch stood.

The various village churches illustrated herewith are many of them much older than those of Panama City, even dating back to the earliest Spanish settlement.

The little church on Taboga Island, in the village of the same name, is one of these and fits naturally into its location at the intersection of the narrow, crooked, cobble stone paved streets.





METROPOLITAN TRUST COMPANY'S FIFTH AVENUE BRANCH BUILDING, NEW YORK CITY. HOLMES & WINSLOW, ARCHITECTS.



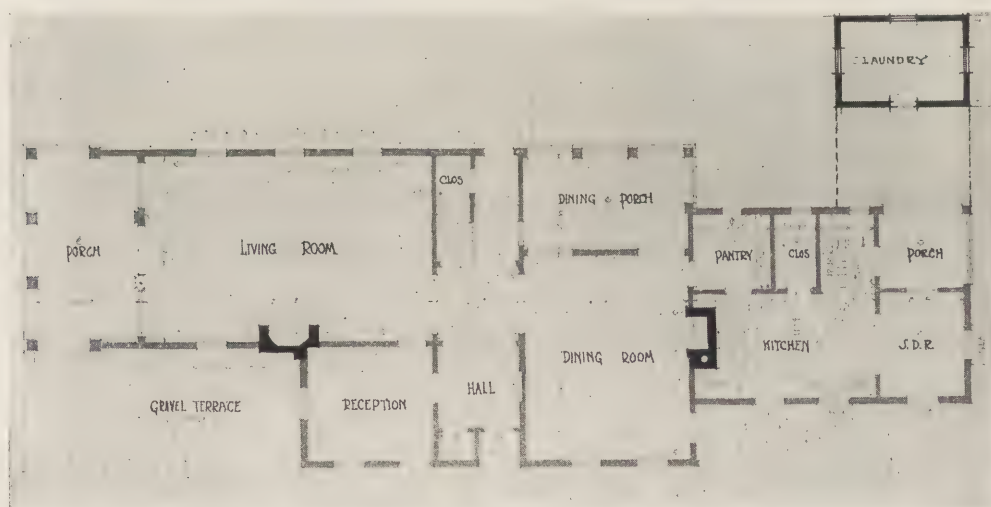
BANKING ROOM—METROPOLITAN TRUST COMPANY'S FIFTH AVENUE BRANCH BUILDING, NEW YORK CITY. HOLMES & WINSLOW, ARCHITECTS.



DIRECTORS' ROOM—METROPOLITAN TRUST COM.
PANY'S FIFTH AVENUE BRANCH BUILDING, NEW
YORK CITY. HOLMES & WINSLOW, ARCHITECTS.



RESIDENCE OF MRS. P. F. COLLIER, SOUTHAMP-
TON, L. I. WARREN & CLARK, ARCHITECTS.



DETAIL OF EXTERIOR AND PLAN OF GROUND FLOOR
—RESIDENCE OF MRS. P. F. COLLIER, SOUTHAMP-
TON, L. I. WARREN & CLARK, ARCHITECTS.



HALL—RESIDENCE OF MRS. P. F. COLLIER, SOUTHAMPTON, L. I.
Warren & Clark, Architects.



PORCH—RESIDENCE OF MRS. P. F. COLLIER, SOUTHAMPTON, L. I.
Warren & Clark, Architects.



PORCH—RESIDENCE OF MRS. P. F. COLLIER, SOUTH-
AMPTON, L. I. WARREN & CLARK, ARCHITECTS.



CORNER OF DINING ROOM, LOOKING INTO HALL
—HOUSE AT BRYN MAWR, PA. CHARLES WILL-
ING, OF FURNESS, EVANS & CO., ARCHITECT.



STAIRCASE AND PART OF HALL—HOUSE AT
BRYN MAWR, PA. CHARLES WILLING, OF
FURNESS, EVANS & CO., ARCHITECT.



LOOKING FROM LIVING ROOM INTO HALL—
HOUSE AT BRYN MAWR, PA. CHARLES WILL-
ING, OF FURNESS, EVANS & CO., ARCHITECT.



FIREPLACE IN LIVING ROOM—HOUSE AT
BRYN MAWR, PA. CHARLES WILLING,
OF FURNESS, EVANS & CO., ARCHITECT.



HALL—OWN HOUSE AT CHESTNUT HILL,
PHILADELPHIA. GEORGE HOWE, OF
FURNESS, EVANS & CO., ARCHITECT.



LOOKING FROM HALL INTO LIVING ROOM—OWN
HOUSE AT CHESTNUT HILL, PHILADELPHIA. GEORGE
HOWE, OF FURNESS, EVANS & CO., ARCHITECT.



CORNER OF LIVING ROOM—OWN HOUSE AT CHEST-
NUT HILL, PHILADELPHIA. GEORGE HOWE,
OF FURNESS, EVANS & CO., ARCHITECT.



LIVING ROOM—OWN HOUSE AT CHESTNUT
HILL, PHILADELPHIA. GEORGE HOWE, OF
FURNESS, EVANS & CO., ARCHITECT.



HALL, FROM FRONT-OWN HOUSE AT CHEST-
NUT HILL, PHILADELPHIA. GEORGE HOWE,
OF FURNESS, EVANS & CO., ARCHITECT.



HALL, FROM REAR—OWN HOUSE AT CHEST-
NUT HILL, PHILADELPHIA. GEORGE HOWE,
OF FURNESS, EVANS & CO., ARCHITECT.



BOOKS ON COLONIAL ARCHITECTURE

By RICHARD FRANZ BAGH

Curator, School of Architecture, Columbia University

Part III.—Dwellings (Continued)

OUR formative architecture has resulted largely from a logical combination and mutual interdependence of two well defined currents of growth. We may trace on the one hand—or at any rate readily reconstruct—the trend of the quick response to utilitarian demands, and we may accurately follow the development of direct European inspiration and suggestion in Colonial architectural results on the other.

The very first building activity brought a workaday supply for the demand of shelter, later for that of comfort and convenience. The stage of building history represented by this structural phase of architecture must be considered a temporary makeshift, a concession to the mechanical exigencies attendant upon the problem of re-establishing in mid-course and in an untamed land a type of life that had been accustomed to a fair degree of comfort and of architectural environment. Measured by the difficulties met by the various groups, this task involved for the Colonists essentially a revision of existence, an unaccustomed demand upon resource and also upon endurance. Such requirements can produce only rude

structures gradually rising in the standard of habitability from the log cabin minimum upward. As the first struggle yields a modicum of victory, as harvest follows harvest in plentiful supply, as fishing and trading find ample reward in productive commodities that bring new blood to the European market, and as, finally, the Colonist is enabled by the light of untold thrift and perseverance to read the economic compass clearly, we note at once the echo of growing prosperity in improved architectural quality on every hand—cropping out gradually in details, in portable objects, then in mass disposition and whole exterior treatment. The firstlings of utility no longer satisfy; physical comfort and convenience they may at the end have offered, but they did not contain within themselves the ultimate possibilities of aesthetic development, nor did they fit snugly enough into the architectural frame which the Colonist had unconsciously carried with him as one of his strong memories from the religiously bigoted mother country. Thus when the call for a better architectural environment came, he sought in vain the inspiration for design in the land of his

conquest, for it had bred no architectural tradition that he might consider available for his purposes or commensurate with his need, and such artistic promise as it held his mind had not been cultivated to perceive. There was then but one course open to him, and that implied a harking back to homeland types to forms made famous through many years of life in Europe, and still kept before his eyes by the constant associations of travel and commerce. Add to this the insistent demand for churches, public buildings of various kinds, and finally for residences of the wealthy, and it will not be difficult to appreciate the readiness with which the Colonist closed his eyes to the question of a potential indigenous type of architecture, perhaps largely of wood, in this country. This seeking for inspiration or actual sources for imitation in the home country brought about the earlier or true Colonial phase of our architecture, for this is built upon a happy blending of both the tendencies thus far mentioned. Furthermore, it is to be regarded as a variegated style manifestation, its particular aspect controlled by the land of origin whence the second of its determining features was derived, whether English, Dutch, German or Swedish, the Colonial manner retains in its earlier and more faithful stage the racial differentiation which may be considered one of the important qualities in its attractiveness.

To the very end, however, of this earlier stage, the effect of struggle, of thrift, of homely beginnings, and of the painfully slow course of parallel cultural progress, must be accounted for, although often overshadowed by local wealth, as in the seaboard towns of New England, and although in so many cases of the actual buildings superseded by reconstructions or rebuildings in the later more acceptable and more thoroughly European Georgian manner. Allowance must also be made in the earlier buildings for the technical limitations due to lack of skill and to the bending of unaccustomed minds to the uses of new materials, though without the resource of invention which might render the new materials into designs expressive of their own qualities, and which was therefore replaced

by sheer imitation of European models—curiously enough almost always with most fortunate results. Conditions in which all of these elements are active factors invariably encourage decided modifications, detailed at first, but in the end embracing the whole architectural field, the variations in the smaller motives often yielding pleasant surprises palpably indicating original form intentions but suggesting also a potentiality of design that explains the rapid progress of later American architecture.

But we must also account for a well defined second phase of our formative architecture. The use of the words "Colonial" and "Georgian" interchangeably betrays a confusion of two points of view that have long led astray students and defied teachers. Historians themselves have not in the past devoted their energies in this field to an analysis of the claims of both titles and it is not until very recently that we find one of their number, Mr. Eberlein, who has closely studied his period, has recognized both designations as in good standing and as thoroughly applicable to particular stylistic products, and has set down their individual and interacting effects. In his volume on *The Architecture of Colonial America*, reviewed in the Architectural Record for March, 1916, the rapidly growing tendency to consider the two as distinctive names for two different though often combined style currents comes to its own, and it is to be hoped that the near future will see the complete acceptance of the new creed in this respect. The general description of our early buildings, i. e., until 1800 or shortly after, indiscriminately as Colonial or Georgian is assuredly wrong, both in the political as well as in the architectural sense. We might better speak of a Colonial manner as the nearest approach to an indigenous architectural style that our early builders could concoct. Even this was, in externals at least, one-half of foreign suggestion. And we might then separately consider the Georgian phase as the later adept imitation of a thorough Renaissance character from contemporary or slightly earlier English models. This phase remained an architectural imposi-

tion upon the true course of building development in this country. It produced many splendid buildings, but it caused the destruction of as many finely characteristic earlier houses of a truly Colonial type which were soon deemed unworthy of the pompous "codfish aristocracy" in New England that characterized in part the last seven decades of our Colonial history and the first two of our separate national existence.

The whole fundamental principle of Georgian architecture, to quote Mr. Eberlein, "afforded a direct antithesis to the conceptions upon which Colonial architecture was based. It breathed the atmosphere of the well ordered classicism that had spread over the Continent and over England in the train of the New Learning and had its outward concomitant in the stately creations inspired by the masterpieces of Greek and Roman antiquity. However modified by the successive media of its transference from the original springs of inspiration, it still voiced the measured formality and easy restraint inherent in the ancient models. It was essentially the architecture of a well-to-do, polished, and, if you will, somewhat artificial state of society that demanded a medium of courtliness and circumstance of surroundings for its proper existence. The formal note of classicism had come into English architecture in the reign of Henry VIII, had flourished apace under Inigo Jones and Sir Christopher Wren, and blossomed richly in domestic forms during the reigns of William and Mary and Queen Anne. With the Queen Anne developments, however, we have but little direct concern in America. It was not until the first George had been some years on the throne that a marked change became evident in the domestic architecture of the American Colonies. By the end of the first quarter of the eighteenth century there had been a marked increase in the wealth of the country. A reasonable security from the alarms of Indian warfare and an orderly and uninterrupted course of civil life left the well-to-do more time to pay to the amenities of existence, and the general growth of material prosperity provided the means to indulge the

taste for larger, better and, in a word, more pretentious domestic environment that accorded with the affluence and important social position of the prominent citizens. When the worthies of the early eighteenth century were thus minded and encouraged to build anew for themselves and erect substantial and more commodious homes for their own use and the enrichment of their posterity, nothing was more natural than that they should turn to the mother country for a suitable style and pattern to direct them in their new undertaking. They were always most punctilious to follow the styles of London in their clothing and prided themselves upon the accuracy with which they kept pace with all the changing fashions in apparel on the other side of the sea. In like manner, also, they looked to the current architectural fashions in England for inspiration to guide them in so momentous a matter as the establishment of a dwelling suited to their estate and fit to be the domicile of succeeding generations of their name."

Quite obviously the two phases of our formative building era discussed above are not to be considered as successive steps in development, without the multifarious readjustments due to a stylistic blood transfusion. Peculiarities of the second phase appeared in the other seemingly before they were historically due to be effective, and details of the earlier time continued as motives grafted upon the main stem of the later as though in defiance of the encroachment of the new European grand manner. What is more a certain consanguinity makes itself apparent as a subcurrent, especially in New England, a relationship due to a continued use of wood both as an original basis of design and as a new vehicle of expression for forms which in the English prototype had appeared in stone. By way of example of the former, at least, the inveterate New England tradition of clapboards may readily be pointed out; a heritage from true Colonial times, it was favored by a continued acceptance in Georgian designs which had always been executed in stone or at least in brick, and which had furthermore been treated in like fashion elsewhere in the Colonies.

The whole of these prefatory remarks may be taken in general as a résumé of the specific circumstances that produced New England architecture roughly up to about 1810 or 1815, at any rate until the abortive Greek and other alleged classic revivals were assured of their brief day of obsession. With the above indication of the various style phases as a background, we may then proceed to a consideration of the published works which have concerned themselves in a restricted sense with the field of formative architecture in the New England states. These publications are easily classified as (1) regional works, namely those that treat the whole of New England as a general area exhibiting fairly uniform characteristics; (2) works dealing with Colonial manifestations in individual states; (3) works concerned with the narrow local effects of style in single cities; (4) monographs on individual houses or groups of houses. To these should be added, of course, the books covering the field at large and containing subdivisions devoted to groups of states or single states, and likewise the volumes of measured details, which, being composed of interesting selections of smaller features, must also be of a more general character, for the collection of such features requires no small degree of selective foraging. Such works almost invariably offer a goodly sprinkling of examples chosen from New England territory.

Among the regional examples we may cite at least two collections of photographs, one of measured details, one of sketches, and three illustrated text volumes. We must mention again Mr. Eric Ellis Soderholtz and Mr. James M. Corner, whose work entitled *Examples of Domestic Colonial Architecture in New England* (Folio, 50 plates, meas. 11 inches by 44 inches. Boston; The Boston Architectural Club; 1891. Rare), maintained the general high quality of the other collections of photographic material issued under the former gentleman's name. Several larger collections have since appeared, but the standard of the earlier work has not been excelled. As is usually the case with books of such character, the limited edition leaves many

a later admirer unsatisfied when the value of the work is finally recognized.

A single volume of sketches has been issued covering the field of New England domestic buildings, that by Arthur Little entitled *Early New England Interiors, Sketches in Salem, Marblehead, Portsmouth and Kittery* (Long quarto, no text, 36 numbered plates. Boston: A. Williams and Company; 1878. Rare). The utility of works of this kind has of course been reduced to a minimum by advances in the art of the camera and more especially by the latter day demand for measured drawings. Books of sketches must present consummate skill in the manipulation of the chosen medium and a decided painter's quality in order to achieve success in the architectural field at the present time, and, granted that the work is successful to this extent, its appeal even then will be along lines and among readers not primarily engaged in the practice of architecture.

A good collection of measured drawings of recent date covering the eastern states is that by Lois L. Howe and Constance Fuller entitled *Details from Old New England Houses* (Folio, no text, 50 plates, meas. eleven inches by fourteen inches. New York: The Architectural Book Publishing Company; 1913. \$9). We are glad to note that this work restricts itself to details only; many others of similar humble intention and restraint would be welcomed. The details are well selected and a number of careful profiles merit attention. The profile or section of mouldings and like features is invariably an honest test of quality and safe guide for study; without it we must rely upon the eye's story alone, while the profile accomplishes the end achieved by the section of a whole interior, giving a suggestion of the sense of touch and a definition of the fact of depth in motives in the effect of which the eye's interpretation is too often the sole reliance. The present work offers good sheets of measured doors, panels, stairs, cornices, and includes also a few furniture plates. Two suggestions for improvement of this and other collections of measured drawings at once present themselves: first, the introduction of a few interesting details

of actual constructional features, e. g., framing methods, joinery solutions generally, as seen in stair landings, upper story overhangs, and the like; second, the introduction of the small photographic perspective at one corner of the plate or in its centre, if feasible, as an optical check for dimensioned line drawings and especially as a concomitant of measured section drawings. Much of the history of Colonial architecture might be written in terms of the first of these suggestions and much impulse to study offered by the second, not to mention the encouragement of the layman in the difficult field of the appreciation of architect's drawings. Dimensioned isometric drawings for construction details would encourage the study of the essentials of the building art of our Colonial past, and would undoubtedly bring to light many interesting developments, as for instance in the question of the origin of the several attractive types of Dutch Colonial roofs, the true use and origin of the much favored clapboard and its frequent understructure of half timber work, in fact the general matter of the relation of builder to architect at a time when the architect as an individual species was gradually distinguishing himself by dint of science and sense from the broader genus of masters of masonry and carpentry. It is obvious, of course, that the immediate modern practical intention of the book of measured drawings often precludes the presentation of such details as we have ventured to suggest; perhaps a better versed future will find in them a useful spur to its revived study of Colonial methods of workmanship when good structural evidence has entirely disappeared.

All the text volumes, of which we record three in the present regional group, are by Mary Harrod Northend. This writer has long identified herself with the exploitation of the Colonial field, both in published photographs and in books. She is at home in the New England district and has presented an account of its chief dwellings in *Historic Homes of New England* (Royal octavo, pp. xvi.+274, with numerous illustrations, chiefly photographs; index. Boston: Little, Brown and Company; 1914. \$5). In

this book the author has frankly adopted the pilgrim's attitude toward the shrine of a past stage in civilization; much of this feeling is noticeable between the lines of her text, which correspondingly and necessarily becomes almost entirely non-technical. Her journeys from home to home have revealed the doleful fact, emphasized by architects and laymen alike, that they are "often tenantless; some with sagging roofs and gaping sides, fast falling into decay." Some, however, finding a happier fortune, are "well preserved and freshly painted, surrounded by well kept lawns and posy beds," with some effort at keeping alive the portrait of a romantic period of growth in the nation, a sturdy time of the laying of foundations. The pilgrim's devotional reserve is likewise maintained in the author's descriptions of the individual buildings, through which the reader is led as by the inveterate itinerary of a Colonial Baedeker, the pages crowded with a multitude of asterisks to indicate the objects meriting special attention. A semi-popular tone is given to the work by this method of writing and the more rigid and unfeeling architectural quality is superseded by the need for satisfying the interested layman. In this field Miss Northend is doing a creditable work. There is no greater source of cultural breadth than the general field of fine arts, and of these architecture above all forms a frame into which daily life is fitted. If its qualities, its history, its inspirational and educational value can be brought home to those who now see least in its products, let the books, whatever their special considerations of style or period, be published *ad nauseam*; time will weed out the chaff among them after their effect is felt.

In the present work a number of the important old mansions of the New England district are given space, beginning with the *House of Seven Gables*, in all twenty-one characteristic examples. There are no plans or measured drawings; the deficiency in this important regard is slightly compensated for by the profusion of photographic reproductions, of which there are over ninety, many of them of interiors not generally accessible. There

is a good index, but we miss the incentive of a bibliographic reference list to encourage the layman to undertake further excursions into a fascinating province of architectural development. The volume is surely useful; although for the architect it would constitute a species of "light reading," for the layman, on the other hand, it might assuredly be considered a good beginning for more extensive study of a highly remunerative kind.

Another volume by Miss Northend considers the problem of making over old structures for modern purposes. In *Remodeled Farmhouses* (Royal octavo, pp. xiv.+264, with numerous photographic illustrations, index. Boston: Little, Brown and Company; 1915. \$5) she has aptly treated over twenty well selected examples of remodeled buildings and has described the alterations that have converted them into attractive modern homes. Interior spaces, roof lines or silhouettes, fireplaces, window and door frames, porches and entrances, and other features as well, have been individually treated under each of the examples considered and their value gauged as possible contributing factors in the process of the remaking. It is found that the situation of the old houses in general, due to the foresight in choosing sites manifested by early builders, is generally thoroughly satisfactory for modern purposes also, and that only the building itself will require attention from the "restorer." A carefully selected wall paper, a coat of paint of proper tint, a judicious restoration of wooden cornice or pediment, or a painstaking new bit of modeled plaster in hopeful imitation of the old, may then operate to transform completely the interior or to a great extent even the exterior of an old house without loss of character. Atmosphere of former times and comfort in accordance with the manufacturers' latest announcements may therefore readily be combined by a wise manipulation and restoration of old forms. To quote the author: "There is a wealth of possibilities in the reconstruction of old farmhouses that are easily recognized by the experienced eye of the architect. The study of lines which determine the size and the design of the

old building is most interesting and teaches a lesson in old time architecture which is extremely fascinating. The adaptation of the house to new and different purposes, the creation of a picturesque result wholly unlike yet following the lines of the original building, calls into play not only skilful designing but careful planning. Many of these old homes contain fine woodwork which is often hidden under layer upon layer of hideous wall paper bought with an eye to price rather than to good taste. The fireplaces are sometimes bricked up and plastered over to permit the use of a modern 'air-tight'; the wainscot and molding are buried under coats of unattractive paint and give little impression of their value until the original walls and woodwork are laid bare. Some houses, more especially those situated near the coast and erected during the period of commercial prosperity, were built by ship carpenters and wood carvers during dull seasons. In these one comes occasionally upon a wonderful old fireplace or perchance a porch that shows artistic carving. Many of these old dwellings naturally show original treatment, and it is to these that the architects of to-day turn for men who were forced to use their brains, since they were unable to turn to books for ideas." And again: "In these old houses, more especially those that are past complete restoration, the architect of to-day frequently finds choice old woodwork. Sometimes it is a rare bit of pumpkin pine such as is seldom seen; again it is a fine old wainscot, or a wonderful staircase that has been saved from the ravages of time. Often some of these details are introduced into another remodeled farmhouse to replace parts too far gone to be used. The growing vogue of the country home has led to the restoration of many of these old time farmhouses and has saved many a valuable structure from falling into decay. Fortunately the appreciation of their possibilities came before it was too late to save them from destruction, although many that could have done service were allowed to go to ruin. There are, however, many fine examples still standing, and some of these have been altered to suit modern uses.

Little wonder the old farmhouse has come into its own, its attractiveness after remodeling making it available for summer or for all the year round uses. * * * Often the house has been photographed to show both its former appearance and the results of the restoration. Some owners, however, have given little thought to the original structure, and it is left to the imagination to picture the house as it used to be." The photographs, as usual, are of good quality, though a better angle might have suggested itself in some cases. In this matter, of course, the exigencies of the site must be admitted as the controlling features. We are inclined to think the volume might have profited by an occasional plan, and assuredly by a few larger scale photographs of details, as of mouldings, decorative features of mantels and the like. There is a detailed index; but again we miss a bibliography.

A volume of considerable value, this time in the broader field of domestic architecture at large, though with a decided emphasis upon New England originals, is the same author's *Colonial Homes and Their Furnishings* (Royal octavo, pp. xxi.+252+plates 117, index. Boston: Little, Brown and Company; 1912. \$5). This undertaking has an authoritative air and the writer proves herself conversant in detail with domestic architecture both of the earlier true Colonial as well as of the later imposing Georgian varieties. The work is composed of seventeen chapters in which the subject matter is treated topically. We find broad headings such as Old Houses, or Old Time Gardens, followed by more detailed discussions of the narrower fields of Colonial doorways, of halls and stairways, or of fireplaces and mantelpieces. There are also good sections on minor features of collateral interest, such as wall paper, four posters, old clocks and other types of furniture. All told the volume is of a certain historical value and will prove especially useful as a parallel reference for Mr. Eberlein's book considered in an earlier issue of the *Architectural Record*. Having once restricted herself to the domestic phase of Colonial architecture, the author found it more advisable to subdivide her

subject into minor headings or categories covering a multitude of details, as we have indicated, rather than to cite a mass of historical data and examples by the cumulative evidence of which to prove certain truths of style and domestic activity. The method followed recommends itself as a pleasing variant from the usual scattered allusions to such matters in works on the Colonial houses. Hitherto, unless we sought the material in separate articles in periodicals, the references to the minor yet none the less important matters of the portable furniture and furnishings of the old houses have been too frequently considered as thoroughly subordinate or accessory details in the general treatment of the edifices.

(To be continued.)

PERIOD FURNITURE

THERE are some books that defy the reviewer. He may be a judge of quality in bookmaking; he may be an able critic of subject matter; but the particular nature of a volume may be such as to make almost impossible in terms of printed words a clear and adequate conception of the book for him who has not held it in his hand. This is especially true of volumes denoted "practical books," or handbooks of manufacture, and of guides or indicators that deal with a multiplicity of details, cataloguing categorizing, indexing and labeling them for the layman as well as for the connoisseur. Unfortunately, the better the workmanship in a volume of this kind, the worse is it apt to fare at the hands of the reviewer. We are therefore handicapped at the outset in attempting to set down in full the features of utility, care in execution and knowledge of style manifested in *The Practical Book of Period Furniture, Treating of Furniture of the English, American Colonial and Post-Colonial and Principal French Periods*, by Harold Donaldson Eberlein and Abbott McClure (J. B. Lippincott Company, Philadelphia and London; octavo, pp. 371, pl. 47+19, many text illustrations; \$5). This is the fourth of the series of "Practical Books" that have come from the Lippincott Press, and it

is easily the best of the four. It is the outcome of a happy collaboration in which the writer and the artist have wrought together to produce a work of general utility for the layman who is neither writer nor artist. The volume is intensely practical, with its succinct grouping, its segregation of dominant characteristics and quick methods of classification and identification. As the authors themselves put it, the material has been "carefully digested" and prepared for general assimilation.

The most attractive feature of the book is the illustrated chronological key preceding the text. This is a series of nineteen plates containing on both sides well selected groups of objects indicating definite stylistic tendencies. Each plate bears as title a style name with inclusive dates, a suggestion of the chief materials in which furniture of that time was built, and a page reference to the text. Referring to the pages cited, the reader finds a chapter whose heading accords with that of the plate in the key. Minor style names, as well as reigns and

dates are also indicated. The chapter then discusses the style in detail under subject headings such as names of pieces: e. g., tables, bedsteads, stools, highboys, settles, etc.; decorative processes: e. g., painting, lacquer, veneer, marquetry, etc.; or motives of decorative design: e. g., scrolls, laureling, pendants, balusters, lunettes, etc.; and finally takes up at length the materials and structure. In the text, again, there are references to the text illustrations, and, in turn, to the chronological key. In addition, there are forty-seven double-tones in the body of the book, a good glossary, a brief bibliography and an exhaustive index. The fourteen chapters concerning the styles are supplemented by one on furnishing and arrangement and another containing much needed safeguards for buyers and collectors. The line drawings by Mr. McClure are thoroughly useful and might readily be more numerous. We commend especially the attention given to sections and profiles, which are cut off with a shilling in the average reference work of this character. R. F. B.



Gothic Architecture in France, England and Italy. (Two Vols.) By Sir Thomas Graham Jackson, Bart., R. A., F. S. A. Ill., Vol I, 208 p., appendix; Vol. II, 319 p., appendix and index, 7 by 9½ inches. Chicago: Cambridge University Press. \$14.50.

The Gothic Quest. By Ralph Adams Cram, F. A. I. A., F. R. G. S. Revised Edition. 404 p., 4½ by 7½ inches. Garden City, N. Y.: Doubleday, Page & Co. \$1.50 net.

Gothic Ornaments. Selected from Various Ancient Buildings in England and France. Exhibiting numerous specimens of every description of decorative detail, from the Eleventh to the beginning of the Sixteenth Century. By Augustus Pugin, Architect. A New and Revised Edition. Ill., 92 Plates, 8½ by 11 inches. London: J. Tiranti & Co. \$3.12.

City Planning. A Series of Papers Presenting the Essential Elements of a City Plan. Edited by John Nolen, Fellow American Society of Landscape Architects. Ill., 436 p., index, 5 by 7½ inches. New York and London: D. Appleton & Co. \$2 net.

Nights. Rome and Venice in the Aesthetic Eighties; London and Paris in the Fighting Nineties. By Elizabeth Robins Pennell. With sixteen illustrations, 303 p., index, 5½ by 8½ inches. Philadelphia: J. B. Lippincott & Co. \$3 net.

The Strength of Materials. A Text-Book for Engineers and Architects. By Ewart S. Andrews, B. Sc., England. With numerous illustrations, tables and working drawings. 586 p., appendix and index, 5 by 8½ inches. New York: D. Van Nostrand Co. \$4 net.



The Architect and the Civic Conscience.

Some months ago we were glad to present Mr. Frederick Ackerman's address to the students of the College of Architecture at Cornell University. The article in question undertook the thoroughly altruistic task of inoculating a portion of the growing generation of architects with the virus of a new creed, a creed that is as obvious as reason itself to any who run and pause only occasionally to read, and which, because of its patent reality, is deprived of appropriate understanding on the part of a "businesslike" profession. Mr. Ackerman preaches a broader idealism, not circumscribed by the office walls, nor yet by the limits of a private practice, but by municipal, state or even federal needs; by the manifest requirements of that essentially gregarious animal, man, who lives in communities, but cannot plan them, or decorate them, or even build them without the architect, from whom, in turn, no friendly assistance is forthcoming unless it be balanced by a check on the national bank. This broader idealism is the secret of public good, whether it be denominated public spirit or altruism; it should be in great measure at the base of every architect's career, and it can do more than buildings themselves to advance the profession of architecture and to enlighten a much maligned public—a public which has always been high-handedly considered irretrievably ignorant of things architectural, however worthy of help otherwise. The community spirit, or broad-gauged conception of professional duties, was in the Greek city-state the keynote of public life; one who had taken no part, direct or representative, in the government of his city was denominated "idios," from which an English word, now of ulterior significance, has been derived.

The field beyond the office walls is an unploughed area of ethical responsibilities, which hitherto have been rudely cast off by the busy practitioner, traveling from consultation to inspection and back to drafting board. Yet these responsibilities are the sign by which the architect must ultimately conquer. The cities of this country will finally awake to a sense of their own magnitude and then a thousand opportunities must be counted lost. It is the proper sphere of the architect now to raise up the level of public intelligence so that it may see the light of civic beauty, and cleanliness, and safety, and health. It is his duty to teach, as all artists must teach, not by a host of carefully studied—or carefully "inspired"—examples, but by ascending the pulpit and stirring a sluggish public conscience. The Pennsylvania Station or the New York Public Library may awaken pride and satisfaction in the citizen; they will not teach him to formulate his own architectural wants. Out of these wants must, in the final balance, come the great new things which shall be called of the twentieth century.

So then, in the end, the artist must be content to serve as a sort of specialized pedagogue, slowly raising those variable and indefinable qualities called popular taste, temperament or sense of beauty so that they may compare with always more rigorous standards. And in these standards the public welfare should be the guiding or axial motive. Then, presently, in your citizen will be engendered a personal pleasure in the growth of civic beauty, for he will be able to appreciate it; he will no longer speak of the improvements "they" are making in the Plaza, but will rather include himself, with the feeling that "we" have a hand in it. For all aspects of city planning should be blessed with a universality of appeal, and this can spring only out of popular understanding. The "cities destined to be havens of multitudes"

which have "grown up with the abandon of petty villages" will then be of the past, for the petty villager will better understand his own potential growth and plot Main Street accordingly. He will not forget his parks or "public lungs"; he will regulate in due time the width of his streets so that gloomy canyons rising to towering heights may not replace four-story buildings without increase of public circulation space; likewise he will apportion his city area for the varied purposes of residence and industry and calculate his traffic facilities with such apportionment in view; in short, he will not be guilty of that lack of prevision—the insistent myopia of city fathers endowed with an atrophied civic conscience.

But, says the architect, we are producing fine buildings; the public demand is met. The people, he believes, should be left to work out civic problems themselves; he is a man of business. That is his sentiment, although he loudly endorses the schemes of a small number of courageous city planners, struggling to regulate a semblance of order out of a chaos of misunderstanding and ignorance and shortsightedness and "citizen's rights." Nature's elements may be left "to work out themselves," but the concrete and tri-dimensional facts of stone and steel are amenable to man-made regulations, and these, in turn, are as efficient as a bull in a china shop, unless there is knowledge brought to their making, unless they can stand the crucial tests of convenience, common sense, effectiveness, cost, durability and health. Civic waste due to civic blindness in such matters, if calculated even roughly, would present an amazing figure in the smallest incorporated community; and this waste is the outcome of makeshifts, the logical result of the blundering efforts of governing bodies serving too many masters. In matters artistic the American public can see, as someone has said, as far as the end of its nose. Perhaps to be effective for the moment this statement would bear qualification. Yet there can be but one source of information to lengthen the range of vision of this American public, and that source is the artists, the architects, themselves. As for the present, instead of trying manfully to elevate public taste to an appreciation of its own civic needs, the usual practice follows a line of much less resistance. A number of persons desiring to aid "the public," procure legislation and hand it down to "the public," which, of course,

pays the resultant taxes. The public is helped in such cases as a dog is helped by a muzzle. The poor public should be taught of its own accord to require such legislation. The process must be slow; so are all such great processes of development, interminably slow; but it must result in civic salvation.

In conclusion, let us say that the heritage to be handed on must be better than that conveyed to us. We must down the nightmare of dirt and the white plague, of gloom and musty air and infant mortality, of the lack of conveniences of cleanliness in dwellings, of bodily discomfort, of traffic inconvenience and danger, of fire peril, of the absence of nature in our streets—in short, of the thousand and one possible evils that may be born of an ignorance of city planning and the default of a civic conscience.

A Bibliographical Annotation.

In reading the entertaining and comprehensive succession of articles in the Architectural Record by Mr. Richard Franz Bach on the bibliography of Colonial architecture I have made a memorandum of one observation of fact which may be of interest. Mr. Bach describes the 1914 edition of Mr. G. Henry Polley's "Architecture, Interiors and Furniture of the American Colonies in the Eighteenth Century," G. H. Polley Co., publishers, Boston. This is practically a reprint of Mr. Polley's work of the same title published in 1895, with the addition of a scholarly foreword by John Lyman Faxon.

In his careful resumé of the contents of the books he mentions, Mr. Bach does not seem to have observed that in the Elwell publication of 1897, G. H. Polley Co., Boston, some of the same plates relating to Southern States are used as in Mr. Polley's own work of 1895, with this exception—that the plates are reversed as regards right and left. Anyone who cares to see the difference it makes to reverse a design of a house as regards right and left may satisfy himself by comparing, say Brooklandwood, in Mr. Polley's and Mr. Elwell's publications. From my knowledge of Maryland houses I am able to state that the Polley plates (1895) are in the correct relation to the object. In the 1914 edition of Polley these same originals are reproduced in the proper aspect. J. M. H.

**A Challenge to
Twentieth
Century
Materialism.**

A wealthy resident of Pennsylvania, Mr. John Pitcairn, has devoted the sum of nearly \$1,000,000 to the erection of the new Swedenborgian Cathedral at Bryn Athyn, Pa. The interesting feature of the project is not, however, the sum made available—which in this country is not regarded as disproportionate for such purposes—but the frankly anachronistic intention of the builders, who plan to eliminate all machine made materials. There will not be two stones alike in the whole structure; there will be continued variety in capitals and supports, and specific variations in all arches and windows. All straight lines have also been avoided in step and column, in rafter and window casing. The Philadelphia Ledger presents an account of this challenge to twentieth century materialism from which we quote: "Every part of the work is by hand. Stone is quarried and cut right on the ground. Tremendous oak rafters, two by three feet in thickness and thirty feet long, to be used in supporting the roof, were cut on Mr. Pitcairn's property a year ago, and fashioned by the hands of skilful craftsmen. No steel or iron, not even a supporting beam or a nail—is to be found anywhere in the building. Wherever joining is necessary oak pins will be used. Plaster, also, has been prohibited—everything in fact of modern invention that could in any way destroy the medieval purity of construction." The minutest care has been accorded to the preparation of all details of the design, and especially to the matter of studying the proper effect in their final positions. Thus plaster models without number were cast, first in small size for a preliminary test of proportion, then at half scale for final approval of detail design, lastly in full size and placed in the ultimate position to be occupied by the cut stone piece. This is, of course, in full accord with the well known point of view of the architect, Mr. Ralph Adams Cram, who places little faith in architectural drawings when life-giving details are to be executed.

All told the building is only two hundred feet in length, seventy-five feet through the

transept, and its maximum height will not exceed one hundred feet, not including a fifty-foot free tower above.

The medieval point of view has been further emphasized by the leveling of ranks among the artists and artisans employed, all of whom are considered equals in the bottega. The best masons available have been gathered for the work; their originality as artisans has been stimulated by permitting them a certain amount of freedom in adding their own conceptions to the work in hand, and their initials appear on each cleanly cut stone.

But the current day and year have intruded, nevertheless, upon the idyllic scene that might otherwise have been staged in 1250 in the Isle de France, for the account above quoted continues: "Mr. Pitcairn even went to the extent of having the train schedule changed in order better to suit the needs of the forces in his charge. As most of the workmen established their headquarters in the city, the railroad abolished the train leaving Bryn Athyn at 4.23 in the afternoon, substituting a schedule at 4.42 to allow them to commute." There is in this an ugly hint of an eight-hour day and of labor unions. But, to be sure, there were guilds in the old days, even though the working hours were measured only by the full course of the sun.

**The
Architectural
Record's
Twenty-fifth
Anniversary.**

Prof. A. D. F. Hamlin's third paper on "Gothic Architecture and Its Critics" will appear in the August number. Its postponement was brought about by our making a very special demand upon the limited time which Prof. Hamlin has at command for literary work during the academic year. The twenty-fifth anniversary of the Architectural Record falls in July, and we believe that the most acceptable way of commemorating the occasion will be to publish a competent review of American architecture during the last quarter-century. We are pleased to be able to announce that Prof. Hamlin has undertaken to write the review, which, we feel confident, will be a notable contribution to architectural history and criticism.



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